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## SYPHILIS AS A CAUSE OF INSANITY.

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That syphilis is the cause of a substantial percentage of existing insanity has long been recognized. Various authors have differently estimated this percentage, but statistics bearing on the question are more or less meager. As this subject is important both from the point of view of public health and from the point of view of public expenditure, it was felt that it was worth while to obtain some definite data showing how large a proportion of the inmates of the State institutes for the insane were insane because of syphilis, and showing also the former occupations of these persons.

A letter was therefore sent to the superintendents of 159 State hospitals for the insane throughout the United States, requesting this information.

Replies were received from 115 of these institutions, and in 88 of these the data supplied were of such character that they could be tabulated. Occupational data were available in 65 instances.

In the 88 replies used for tabulation, the following States are represented:

Arizona.	Maryland.	Oklahoma.
California.	Massachusetts.	Oregon.
Colorado.	Michigan.	Pennsylvania.
Connecticut.	Minnesota.	Rhode Island.
District of Columbia.	Mississippi.	South Carolina.
Georgia.	Missouri.	South Dakota.
Illinois.	Montana.	Tennessee.
Indiana.	Nebraska.	Texas.
Iowa.	New Hampshire.	Vermont.
Kansas.	New Jersey.	Virginia.
Kentucky.	New York.	West Virginia.
Louisiana.	North Dakota.	Wisconsin.
Maine.	Ohio.	Wyoming.

It can be seen from this list that a wide geographical area is covered by the figures.

As the percentages varied substantially for inmates and for admissions it seemed best to separate the two in tabulation. It was pointed out in several answers that the lives of those whose insanity is due to

syphilis are comparatively short, and that therefore the percentage is higher among admissions than it is among the inmates.

TABLE I.—Percentage of inmates of State institutions for the insane whose insanity was a result of syphilis, and percentage of admissions whose insanity was a result of syphilis.

Name of hospital.	Percentage of inmates insane as a result of syphilis.			Percentage of admissions insane as a result of syphilis.		
	Male.	Female.	Total.	Male.	Female.	Total.
Arizona:						
State Hospital, Phoenix.....	6.0	7.4	6.4			
California:						
Mendocino State Hospital, Talmage.....						7.0
Napa State Hospital, Napa.....	13.6	4.9	10.3			
Southern California State Hospital, Patton.....				21.5	9.4	16.4
Colorado:						
Colorado State Hospital, Pueblo.....	15.7	5.4	11.2			
Connecticut:						
State Hospital, Middletown.....	2.5	.9	1.6			
Norwich State Hospital, Norwich.....	5.6	2.1	3.9			
District of Columbia:						
St. Elizabeths Hospital, Washington.....	4.6	1.4	3.7			
Georgia:						
State Sanitarium, Milledgeville.....						6.4
Illinois:						
Anna State Hospital, Anna.....				4.0	1.0	2.7
Alton State Hospital, Upper Alton.....	4.3	.4	2.5			
Elgin State Hospital, Elgin.....				21.0	.7	2.9
Jacksonville State Hospital, Jacksonville.....			5.0			
Kankakee State Hospital, Kankakee.....	13.4	4.3	9.9			
Watertown State Hospital, Watertown.....	2.5	.4	1.5			
Indiana:						
Central Indiana Hospital for the Insane, Indianapolis.....				14.8	3.7	
Iowa:						
Independence State Hospital, Independence.....				4.3	.7	2.8
Mount Pleasant State Hospital, Mount Pleasant.....	2.7	.7	1.8			
Kansas:						
Oswatimie State Hospital, Oswatimie.....				14.0	6.4	10.5
Topeka State Hospital, Topeka.....	5.0	1.3	3.4			
Kentucky:						
Central State Hospital, Lakeland.....						7.1
Louisiana:						
Louisiana Hospital for Insane, Pineville.....	6.1	2.9	4.5			
Maine:						
Augusta State Hospital, Augusta.....	7.9	3.7				
Bangor State Hospital, Bangor.....	4.4	1.5				
Maryland:						
Springfield State Hospital, Sykesville.....				16.8	7.4	12.8
Spring Grove State Hospital, Catonsville.....				15.0	5.0	10.0
Massachusetts:						
Bridgewater State Hospital, State Farm, Bridgewater.....			.3			
Danvers State Hospital, Hathorne.....	11.9	2.4	6.5			
Foxboro State Hospital, Foxboro.....	4.3	.8	2.3			
Medfield State Hospital, Harding.....	2.4	1.3	1.8			
Northampton State Hospital, Northampton.....	3.5	2.7	3.1			
State Infirmary, Tewksbury.....	7.2	.6	2.4			
Taunton State Hospital, Taunton.....	3.3	2.6	2.9			
Westboro State Hospital, Westboro.....				8.7	2.1	4.5
Worcester State Hospital, Worcester.....	6.0	4.0	4.9			
Michigan:						
Ionla State Hospital, Ionia.....						7.4
Kalamazoo State Hospital, Kalamazoo.....	9.5	2.3	5.9	21.4	8.2	16.2
Newbury State Hospital, Newbury.....				10.0	4.0	
Pontiac State Hospital, Pontiac.....	8.1	2.7	5.6	11.1	4.1	10.1
Traverse City State Hospital, Traverse City.....				17.4	13.2	15.5
Minnesota:						
Fergus Falls State Hospital, Fergus Falls.....				22.0	19.0	
Rochester State Hospital, Rochester.....	12.8	3.2				
Mississippi:						
Mississippi State Insane Hospital, Fondren.....			2.8			
Missouri:						
State Hospital No. 2, St. Joseph.....	8.0	3.5				
State Hospital No. 3, Nevada.....	4.0	.3				
State Hospital No. 4, Farmington.....	1.3	.0				
Montana:						
Montana State Hospital for Insane, Warm Springs.....			7.8			

TABLE I.—Percentage of inmates of State institutions for the insane whose insanity was a result of syphilis, and percentage of admissions whose insanity was a result of syphilis—Continued.

Name of hospital.	Percentage of inmates insane as a result of syphilis.			Percentage of admissions insane as a result of syphilis.		
	Male.	Female.	Total.	Male.	Female.	Total.
Nebraska:						
Ingleside Hospital for Insane, Ingleside.....	2.4	.02	1.5			
New Hampshire:						
New Hampshire State Hospital, Concord.....	2.2	1.7	1.9			
New Jersey:						
New Jersey State Hospital, Morris Plains.....	4.5	0.8				
New York:						
Binghamton State Hospital, Binghamton.....				21.1	5.4	13.2
Brooklyn State Hospital, Brooklyn.....				16.7	5.0	10.0
Buffalo State Hospital, Buffalo.....				28.6	8.4	19.2
Central Islip State Hospital, Central Islip, L. I.....	5.7	2.7	4.3	19.6	7.3	13.0
Gowanda State Homeopathic Hospital, Collins.....	7.7	2.9		20.0	10.0	16.6
Hudson River State Hospital, Poughkeepsie.....				20.1	3.0	11.3
Kings Park State Hospital, Kings Park.....				21.9	6.1	14.3
Manhattan State Hospital, Wards Island, N. Y.....	9.2	2.8	5.6	4.7	7.5	6.0
Middletown State Homeopathic Hospital, Middle-town.....	3.7	.7	1.8	7.4	7.5	7.4
Rochester State Hospital, Rochester.....				16.1	6.6	11.1
St. Lawrence State Hospital, Ogdensburg.....			2.7	14.7	8.9	12.3
Utica State Hospital, Utica.....	4.7	.9	2.7	13.2	4.9	9.3
Willard State Hospital, Willard.....	4.2	1.0	2.5	16.3	6.0	11.4
North Dakota:						
State Hospital for Insane, Jamestown.....	5.0	2.4	4.1			
Ohio:						
Athens State Hospital, Cleveland.....	5.5	2.3	3.7			
Dayton State Hospital, Dayton.....	21.0	13.0				
State Hospital for Criminal Insane, Lima.....	.2		.2			
Longview Hospital, Cincinnati.....						13.0
Massillon State Hospital, Massillon.....						15.0
Toledo State Hospital, Toledo.....				16.8	9.2	13.0
Oklahoma:						
Oklahoma State Hospital, Norman.....			5.4			
Western Oklahoma Hospital, Supply.....	3.2	0	3.0			
Oregon:						
Eastern Oregon State Hospital, Pendleton.....	3.5	1.3	2.8			
Pennsylvania:						
Homeopathic State Hospital, Allentown.....				13.0	8.0	10.0
Pennsylvania State Lunatic Hospital, Harrisburg.....	7.0	1.0		20.0	6.4	
State Hospital, Warren.....				18.9	4.1	12.4
State Hospital for Insane, Norristown.....	16.0					
Rhode Island:						
State Hospital for Mental Disease, Howard.....	6.8	1.8	4.4			
South Carolina:						
State Hospital for Insane, Columbia.....	1.8	.7	1.2			
South Dakota:						
State Hospital, Yankton.....				15.0	3.0	
Tennessee:						
Eastern Hospital for Insane, Bearden.....	6.0	4.0				
Texas:						
S. W. Insane Asylum, San Antonio.....	6.8	1.5				
Vermont:						
Vermont State Hospital for Insane, Waterbury.....	2.4	1.3	1.8			
Virginia:						
Eastern State Hospital, Williamsburg.....	6.5	2.5	4.6			
West Virginia:						
Huntington State Hospital, Huntington.....	1.0	.5				
Wisconsin:						
Northern Hospital for Insane, Winnebago.....				10.0	4.0	7.5
Wisconsin State Hospital for Insane, Mendota.....				8.0	1.9	5.6
Wyoming:						
Wyoming State Hospital for Insane, Evanston.....	9.0	6.0				

The results of the inquiry may be summarized as follows:

Percentage of male inmates whose insanity is due to syphilis.....	6.2
Percentage of female inmates whose insanity is due to syphilis.....	2.2
Percentage of inmates (M and F) whose insanity is due to syphilis.....	3.9
Percentage of male admissions whose insanity is due to syphilis.....	15.5
Percentage of female admissions whose insanity is due to syphilis.....	6.1
Percentage of admissions (M and F) whose insanity is due to syphilis.....	10.4

It must be borne in mind that these figures do not represent the incidence of syphilis among the insane, or the number of those giving a positive Wassermann. Some insane persons have contracted syphilis after becoming insane; others contracted syphilis before becoming insane, their insanity being due, however, to other causes.

TABLE II.—Occupations of inmates of 65 State institutions for the insane whose insanity was caused by syphilis. (The list covers occupations of 4,441 men and 1,195 women.)

Occupation.	Number.		Occupation.	Number.	
	Male.	Female.		Male.	Female.
Accountant.....	10		Detective.....	3	
Aerobat.....	2		Dishwasher.....	3	
Actor.....	15	1	Domestic.....		93
Advertising distributor.....	2		Draftsman.....	7	
Agent.....	37		Draper.....	2	
Architect.....	3		Drill reamer.....	1	
Army officer.....	3		Druggist.....	16	
Artist.....	5		Dyer.....	1	
Assembler.....	1		Efficiency expert.....	1	
Athletic manager.....	1		Electrician.....	41	
Auctioneer.....	1		Electroplater.....	3	
Awning maker.....	1		Elevator operator.....	7	
Baker.....	26		Engineer (civil).....	5	
Banker.....	1		Engineer (gas).....	1	
Barber.....	63		Engineer (locomotive).....	19	
Barkeeper.....	60		Engineer (mining).....	3	
Basket worker.....	2		Engineer (stationary).....	12	
Billiardist.....	1		Engraver.....	5	
Bill poster.....	1		Errand boy.....	2	
Blacksmith.....	60		Expressman.....	3	
Boatman.....	1		Factory worker.....	30	12
Boiler maker.....	8		Farm laborer.....	2	
Bookbinder.....	2		Farmer.....	236	1
Bookkeeper.....	10	4	Firman.....	29	
Bookblack.....	4		Fireman (locomotive).....	4	
Box maker.....		1	Fisherman.....	5	
Brakeman.....	9		Florist.....	2	
Brewer.....	3		Foreman.....	10	
Brick mason.....	12		Foreman (foundry).....	2	
Broker.....	3		Fortune teller.....	1	
Broom maker.....	3		Furrier.....	6	
Builder tradesman.....	15		Gambler.....	1	
Business man.....	16		Garage man.....	1	
Butcher.....	31		Gardener.....	7	
Buyer.....	3		Garment cutter.....	4	
Cabinetmaker.....	8		Glass blower.....	3	
Canvassers.....	2		Glass cutter.....	2	
Cap maker.....	1		Glove maker.....		4
Carpenter.....	121		Glazier.....	1	
Caterer.....	1		Grinder (cutlery).....	1	
Charity worker.....	1		Grocer.....	9	
Chaufeur.....	28		Guard.....	5	
Chemist.....	4		Gunner.....	1	
Cigar maker.....	20	4	Hack driver.....	4	
Clergyman.....	3		Hairdresser.....		1
Clerk.....	147	10	Harness maker.....	7	
Clown.....	1		Hatter.....	2	
Coachman.....	3		Horse dealer.....	4	
Coal dealer.....	1		Hospital attendant.....	6	
Coal miner.....	2		Hostler.....	3	
Conductor (street railway).....	2		Hotel boy.....	1	
Conductor (railroad).....	19		Hotel manager.....	9	
Concrete worker.....	1		Housekeeper.....		42
Confectioner.....	2	2	Housewife.....		551
Contractor (building).....	17		House worker.....		153
Convict.....	1		Ice-cream maker.....	1	
Cook.....	45	14	Ice man.....	2	
Cooper.....	4		Inspector.....	8	
Custodian.....	1		Inspector (arms).....	2	
Dairyman.....	5				
Dentist.....	6	2			

TABLE II.—Occupations of inmates of 65 State institutions for the insane whose insanity was caused by syphilis. (The list covers occupations of 4,441 men and 1,195 women)—Continued.

Occupation.	Number.		Occupation.	Number.	
	Male.	Female.		Male.	Female.
Inspector (street railway).....	1		Railroad employee.....	112	
Interpreter.....	2		Railroad employee (street).....	6	
Ironworker.....	25		Rancher.....	38	
Janitor.....	10		Real estate agent.....	2	
Jeweler.....	8		Real estate broker.....	6	
Jockey.....	2		Restaurant keeper.....	4	
Junk dealer.....	3		Roofer.....	5	
Kite maker.....	1		Rough rider.....	1	
Laborer.....	1,063	21	Rubber worker.....	1	
Lather.....	4		Sailor.....	31	
Laundry employee.....	4		Sail worker.....	1	
Lauderer.....	5		Salesman.....	178	
Laundress.....		25	Saleswoman.....		7
Lawyer.....	33		Saw maker.....	2	
Leather worker.....	7	1	Scavenger.....	1	
Linotyper.....	3		Schoolgirl.....		1
Lithographer.....	2		Scrub woman.....		3
Livery-stable employee.....	8		Seamstress.....		25
Locksmith.....	2		Shipping clerk.....	8	
Longshoreman.....	4		Ship fitter.....	4	
Loom fixer.....	1		Shipyards worker.....	1	
Lumberman.....	20		Shoemaker.....	39	
Machinist.....	116		Shop hand.....	2	
Manager.....	1		Silver buffer.....	1	
Manicurist.....		1	Slater.....	1	
Manufacturer.....	2		Soap maker.....	1	
Mason.....	25		Soldier.....	18	
Mechanic.....	56		Stable hand.....	1	
Merchant.....	75	1	Station agent (railroad).....	1	
Messenger.....	2		Steam fitter.....	6	
Metal worker.....	33		Stenographer.....	6	2
Meter reader.....	1		Stevadore.....	1	
Milkman.....	2		Steward.....	8	1
Milliner.....	1	8	Stock dealer.....	1	
Mill hand.....	22	13	Stonecutter.....	3	
Miner.....	85		Straw worker.....	1	
Motorman.....	4		Student.....	1	
Molder.....	24		Superintendent (of the poor).....	1	
Munition worker.....	1		Superintendent (mill).....	1	
Musician.....	33	2	Tailor.....	58	
Naval officer.....	7		Teacher.....	5	1
News agent.....	1		Teamster.....	76	
Newspaper employee.....	6		Telegrapher.....	28	
Newspaper reporter.....	5		Telephone factory worker.....	2	
Nurse.....	1	10	Telephone installer.....	3	
Oiler.....	4		Telephone operator.....	2	2
Optician.....	2		Theatrical worker.....	5	1
Oysterman.....	2		Ticket agent (railroad).....	1	
Packer.....	3	1	Timekeeper.....	2	
Painter.....	96		Tinsmith.....	8	
Paper hanger.....	4		Toolmaker.....	7	
Paper worker.....	9		Tramp.....	6	
Peddler.....	15		Typewriter aligner.....	1	
Physician.....	23		Typesetter.....	4	
Photographer.....	8		Undertaker.....	3	
Piano maker.....	1		Upholsterer.....	2	
Piano tuner.....	1		Usher.....	1	
Pilot.....	1		Veterinary surgeon.....	4	
Plasterer.....	9		Waiter.....	53	9
Plumber.....	27		Watchmaker.....	4	
Policeman.....	18		Watchman.....	12	
Postman.....	6		Weaver.....	11	2
Post-office employee.....	1		Well digger.....	1	
Porter.....	21		Wire maker.....	1	
Presser.....	3		Whip maker.....	1	
Priest.....	1		Woolworker.....	15	
Printer.....	31		Yarlmaster.....	1	
Promoter.....	1		None stated.....	241	141
Prostitute.....		22	Total.....	4,441	1,195
Publisher.....	1				

The first impression made by the table of occupations is that of diversity, 266 different occupations being represented. They include all varieties of work, and the occupations range from unskilled laborers to tradesmen, skilled craftsmen, business men, artists, and professional men. The seven classes of men contributing the highest numbers are as follows:

Laborers.....	1,063
Farmers.....	236
Salesmen.....	178
Clerks.....	148
Carpenters.....	121
Machinists.....	116
Railroad employees.....	112

Among the women the following occupations give the highest number:

Housewives.....	551
House workers.....	153
Domestics.....	93

In interpreting these figures it must be remembered that those classes of occupations showing the highest number of persons insane because of syphilis are, for the most part, the preponderating occupations of the country. That is, the fact that 1,063 laborers and 236 farmers were found to be insane because of syphilis does not mean that laborers are more apt to go insane because of syphilis than farmers, as there are many more laborers than farmers in the population of the country.

It is believed that the only deduction that can justly be made from the list of occupations is that those who go insane from syphilis are not confined to any one class, but that they are drawn from practically all classes and all occupations.

In conclusion, attention should be called to the fact that this paper deals only with the incidence of mental disorders due to syphilis arising among persons under public care. As a sequel to this article it would appear to be valuable for some studies to be made in regard to the duration of insanity due to syphilis and the length of stay in the hospital in order that some deductions may be drawn to show economic losses.

## REPORT ON INVESTIGATION OF TYPHOID FEVER EPIDEMIC AT GREENEVILLE, TENN.<sup>1</sup>

By C. N. HARRUB, Associate Sanitary Engineer, United States Public Health Service, in cooperation with the Tennessee State Board of Health.

During the period April 6 to June 20, 1920, an outbreak of typhoid fever occurred in Greeneville, Tenn., with a total of 61 cases and 7 deaths (1 case and 1 death occurring in the county outside the town

<sup>1</sup> From report made by the writer to the State Board of Health of Tennessee.



of Greeneville); and, in response to a request from the officials of that city, I made an investigation into the cause of the epidemic.

#### Water Supply.

As the previous history of the water supply showed it to be of inferior quality, an examination of the supply, with sanitary survey, was made as the first step in the investigation.

The water is obtained from a spring which issues from under a limestone ledge almost in the center of the city. It is located in the bottom of a basin toward which a large part of the town drains. A concrete pool has been constructed at the spring, but it affords very little protection against contamination. A small house is built over the intake, but the pool is open. From this upper pool the water is piped to a second open pool at the pumping station, located on the edge of a small creek which is the main drainage channel for the city. From this pool the water is pumped to the reservoir, whence it flows by gravity to the city. During the epidemic of typhoid fever in 1913 a hypochlorite plant was installed to disinfect the water before it was pumped into the reservoir. The hypochlorite solution was discharged into the pool at the pumping station, a few inches from the end of the suction main.

The plant is owned by the city, and about 90 per cent of the people are served with city water. The present daily consumption is about 500,000 gallons. During the dry weather the supply is not sufficient to meet the demands and it is necessary to restrict the use of water to necessary purposes only.

#### Sanitary Survey.

The sanitary survey revealed a very unsatisfactory condition. As stated above, the location of the spring is extremely bad. It is in practically the lowest spot in town and is surrounded by dwellings. Previous to the establishment of a public water supply, private wells were used. Some of these have been proved by test to be directly connected with the source of supply of the spring. During the digging of one of these wells, the owner noted that while finishing the well the spring ran muddy; and in another instance dye placed in the well came out through the spring. Surface drainage from a large area runs directly to the spring. A concrete storm sewer has been built which discharges into the small creek just below the spring. In times of heavy rain this creek floods back into the spring. A flap valve has been put on a pipe which passes through the concrete wall surrounding the pool, but it is tipped back on the pipe, and therefore does not close. It is very doubtful whether it would be of any advantage if put into operation, as it would not close tight.

Since the installation of the public water supply many wells have been abandoned, and others have been used as cesspools. The one

tested with dye was so used, and, as shown by the test, was contributing pollution directly to the spring. Cesspools were in common use in the drainage area of the spring, and undoubtedly all are polluting the underground waters which find their outlet at the spring.

At the lower pool near the pumping station there is only a concrete wall between the water supply and the polluted creek. There are several open pipes through this wall, and when the creek is flooded these pipes are sometimes submerged. At such times cotton waste is stuffed into the pipes to keep the creek water out as much as possible; but this affords very poor protection against so polluted a stream.

The hypochlorite plant, which was relied upon to safeguard the people of the city against typhoid fever and other water-borne diseases, originally consisted of a mixer, two solution tanks, and an orifice box. One of the solution tanks has been out of commission for the past three years, and it has therefore been necessary to rely on one solution tank. This necessarily prevents proper operation of the plant, as it does not allow any opportunity for the solution to settle. Consequently, the suspended lime passes to the orifice box, where it may partially clog the orifice and reduce the flow of the solution and result in only partial disinfection of the water. The lime also gives trouble in the solution feed pipes. It has been customary at this plant to keep the solution stirred, so that even were the two solution tanks in service, these troubles would be experienced. It was apparent that the hypochlorite plant was not doing the work it was thought to be doing and was not sufficient protection to the water consumers.

The spring has been known to be contaminated for a long time. According to the superintendent of the waterworks, all the analyses for the past eight years have shown the presence of sewage organisms. Only three of these analyses are available, the results of which are shown below:

September 22, 1917:

Bacteria per c. c., 37° C.....	600
Bacteria per c. c., 20° C.....	580
B. coli present.	

July 7, 1919:

Bacteria per c. c., 37° C.....	3,000
B. coli, 10 c. c.....	5+, 0-
B. coli, 1 c. c.....	1+, 0-

May 19, 1920:

Bacteria per c. c., 37° C.....	6,440
B. coli, 10 c. c.....	5+, 0-
B. coli, 1 c. c.....	1+, 0-

Samples were sent to the State board of health laboratories just previous to my arrival in Greeneville. The information sent with the



samples as to the source is not sufficient to show whether they are all from the public supply; but two of them marked "Mason" and "Spring" are very bad, while two marked "Tucker" and "Davis" are good. The results of analyses of these samples are shown in the following table:

*Analyses of samples of water.*

	Source.			
	Davis.	Tucker.	Spring.	Mason.
Bacteria per c. c., 20° C.....	44	110	1,500	800
Bacteria per c. c., 37° C.....	30	90	1,200	670
B. coli, 10 c. c.....	0+, 5—	0+, 5—	5+, 0—	4+, 1—
B. coli, 1 c. c.....	0+, 3—	0+, 3—	2+, 1—	2+, 1—
B. coli, 0.1 c. c.....	0+, 3—	0+, 3—	1+, 2—	1+, 2—

On account of the condition of the water supply and the unreliability of the hypochlorite plant, steps were immediately taken to provide positive disinfection of the supply. An emergency liquid chlorinator had been taken to Greeneville from the State board of health, and through the courtesy of Dr. Yancy, city health officer of Kingsport, a cylinder of liquid chlorine was obtained from that place and put into service as soon as possible. When the chlorinator was operating satisfactorily, the hypochlorite plant was discontinued.

A visit was paid to each of the practicing physicians to get a list of their cases of typhoid fever during the outbreak. The dates of onset of the various cases are shown in the accompanying table.

In addition to the 60 cases and 6 deaths recorded in the table, there was one case in the county outside of Greeneville which was fatal, making a total of 61 cases and 7 deaths during the epidemic. This corresponds to a morbidity rate for the epidemic period of 2,033 per 100,000 population, a death rate of 233 per 100,000 population, and a mortality percentage of 11.5.

A study of the data collected reveals the following facts: One hundred per cent of the cases used city water for drinking, all or part of the time, and 84 per cent used it exclusively. Four, or 13 per cent, used cistern water in part, and one used water from a spring at his home in the country. In no case was the drinking water boiled previous to the appearance of the disease.

Investigation into the milk supply and the use of uncooked vegetables and ice cream showed that these were unrelated to the outbreak.

Nineteen, or 61.3 per cent, of the cases investigated occurred in houses connected to the sewer; 10, or 32.3 per cent, were not connected to the sewer; 1 lived beyond the limits of the sewerage system, and for 1 the information was not obtained. In the 10 cases not connected to the sewer, open surface closets were used. None

of these was fly proof or in a sanitary condition. In every instance, except the one from the country, the street on which the patient lived is sewerred, and proper means of disposal of sewage is provided. In three instances where the sewer connection had been made, a surface closet was still maintained on the premises. One of those, however, was not used at the time of the investigation.

*Dates of onset of cases of typhoid fever in Greeneville, Tenn., and number of cases by weeks, Apr. 6 to June 26, 1920.*

Cases by date of onset.		Number of cases by weeks.	
Date.	Number of cases.	Week ended—	Number of cases.
Apr. 6.....	1	Apr. 10.....	1
Apr. 15.....	2	Apr. 17.....	2
Apr. 20.....	1	Apr. 24.....	1
Apr. 26.....	1		
Apr. 30.....	2		
May 1.....	15	May 1.....	8
May 2.....	12		
May 3.....	1		
May 4.....	2		
May 5.....	11		
May 7.....	13		
May 8.....	1	May 8.....	10
May 10.....	1		
May 14.....	1		
May 15.....	12	May 15.....	4
May 16.....	1		
May 17.....	1		
May 19.....	1		
May 21.....	1		
May 22.....	1	May 22.....	5
May 23.....	1		
May 27.....	11		
May 28.....	1		
May 29.....	1	May 29.....	4
May 30.....	5		
June 1.....	1		
June 2.....	1		
June 3.....	1		
June 4.....	2		
June 5.....	1	June 5.....	11
June 6.....	2		
June 7.....	4		
June 8.....	2		
June 10.....	2		
June 12.....	1	June 12.....	11
June 17.....	1		
June 18.....	1	June 19.....	2
June 20.....	1	June 26.....	1
Total.....	60		63

<sup>1</sup> One of these cases died. Total deaths, 6.

<sup>2</sup> Chlorinator installed June 12.

Only two of the cases had been away from the city during the two weeks previous to the onset of the disease. One of these had visited Bristol and had been sick in bed two days while there.

Three instances were found where more than one case occurred to the family. In one of these there were five cases, three of which were possibly secondary cases from the first case. The mother was first taken sick; 5 days later the father was taken down, and 15 days after the mother became sick two of the children became ill and a third child about two weeks later. There is no sewer connection

from the house where this family lives, and the excreta were discharged on the ground. A case of typhoid occurred next door to this place 10 days after the two children were taken sick. So far as ascertained this was the only place where a case occurred in the immediate neighborhood of a previous case where a surface toilet was used.

So far as learned none of the persons afflicted had ever been vaccinated with antityphoid vaccine, although the question was not asked in every case. Vaccination among other members of the family was very generally practiced after the occurrence of the first case in the family. An attempt was made to arrange for free vaccination for those persons unable to pay, provided they furnished their vaccine. Each of the practicing physicians was to give one hour per week to this work. Later advices indicated that this scheme did not work out as planned, and practically nothing was done.

On account of a local feeling that the ice furnished by the Greenville Ice Co. might be responsible for the typhoid outbreak a special inspection of the ice plant was made. The raw-water system is used in manufacturing the ice; that is, the water is not distilled before use. Instead, it is kept agitated by air to prevent the inclusion of foreign matter during the freezing process. City water is used.

A dual connection between the city water and the water from the polluted creek mentioned earlier in this report was found. This arrangement was made so that either city or creek water could be used for condensing the ammonia. The city water used in ice making is drawn from the same pipe only about 10 feet from the valve separating the two waters, and if for any reason the city water was cut off or failed while the creek water was being used for condensing, the creek water might be drawn into the filling tank and used in making ice. It was urged that this dual connection be done away with and city water used altogether for condensing purposes.

A study of the locations of the cases indicates a general source of infection rather than fly dissemination from local foci. One thing which at first was without apparent explanation was that very few cases of typhoid occurred on the east side of Main Street. In endeavoring to determine the reason for this it was learned that there are several small springs in that part of town, at least two of which are used quite generally by people in the vicinity as a source of drinking water. These springs were examined and samples of the water taken to the laboratory for analysis in order to compare them with the city water. One of these springs is located on the old Andrew Johnson property and the other is known as the Parks spring. The former is poorly protected against pollution, a tile pipe placed vertically in the spring to prevent the sides from caving in being the only attempt at protection. The Parks spring has been concreted and housed, but steps lead down to the level of the water

and polluting matter may be carried in on the feet of people going after water. The analyses of these waters are as follows:

	Johnson.	Parks.
Bacteria per c. c., 20° C.....	1, 100	500
Bacteria per c. c., 37° C.....	1, 090	420
B. coli, 10 c. c.....	4+, 1-	3+, 2-
B. coli, 1 c. c.....	2+, 1-	1+, 2-
B. coli, 0.1 c. c.....	1+, 2-	0+, 3-

Although these analyses indicate that the water from these springs is far from pure, it is much better than the city water, especially that from the Parks spring. The absence of typhoid fever in that part of the city is probably due to the use of water from these springs. The presence of sewage organisms in both springs shows them to be potentially dangerous, and it should be borne in mind that the appearance of a single case of typhoid fever in the area contributing to these springs might infect them and thus spread the disease among all the users of this water.

The city is from 85 to 90 per cent sewered, and probably 93 per cent of the people could be served by the sewers; yet only about one-third of the houses are connected. The city passed an ordinance which requires connection wherever the sewers are available; but it has not been enforced, mainly because of the inadequacy of the water supply. During the dry summer months the supply has not been sufficient for the demands for the past few years, and increased use of inside flush closets would still further deplete the supply and cause more serious shortage.

The inspection of the waterworks plant revealed immediately the danger of incomplete disinfection of the water and of the occurrence of an epidemic of water-borne disease. This was explained to the board of water commissioners at a special meeting called for that purpose, and the necessity for immediately securing and installing new and efficient apparatus for constantly sterilizing the water was shown. As a result of this meeting, the superintendent was authorized to order a liquid chlorinator and two cylinders of chlorine. These orders were sent immediately. In the meantime the emergency apparatus furnished protection to the city.

It was also explained to the commissioners that providing proper sterilization of the water is only the first step toward securing safe water, and that filtration, followed by disinfection, is necessary if a safe, as well as a clean, water is to be furnished at all times.

In response to inquiry as to the comparative cost of operation of a liquid chlorinator and the use of hypochlorite of lime for disinfecting the water, it developed that the estimated cost for liquid chlorine was about four times the actual amount paid last year for hypochlorite, notwithstanding the fact that the cost per pound for liquid

chlorine is less than two-thirds the cost per pound of available chlorine in the hypochlorite. The only inference that could be drawn from this is that instead of using an average of 6 pounds of hypochlorite per day, as stated, the actual average was about 1 pound per day. This would correspond to about 0.07 p. p. m. available chlorine, which would not be sufficient to produce the required disinfection. The above figure is based on  $33\frac{1}{3}$  per cent available chlorine, and is about the maximum that could be expected.

#### Conclusions.

The following conclusions were drawn as a result of this investigation:

1. The city is suffering from an epidemic of typhoid fever which is undoubtedly caused by a polluted water supply. The data collected indicate that the water supply is the responsible agent.

2. The water supply of Greeneville is grossly polluted and is a constant and serious source of danger to the health of the community.

3. The location of the spring from which the water is obtained is such that it is practically impossible to prevent the access of polluting matter.

4. The spring is the outlet for the ground water under a large portion of the city.

5. On account of the limestone formation underlying the city there is practically no natural purification of the seepage from open-surface closets and cesspools before reaching the ground water, and the ground water underneath the entire city is probably polluted by sewage.

6. The old hypochlorite plant which has been relied on to protect the city against water-borne diseases is worn out, unreliable, and not a sufficient safeguard.

7. The hypochlorite plant has not been operating as efficiently as it was believed to be and has undoubtedly allowed water only partially disinfected to enter the mains.

8. The installation of apparatus to insure constant and efficient disinfection of the water is immediately necessary.

9. Filtration of the water is necessary if a clean as well as safe supply is to be provided.

10. The present supply is entirely inadequate, and provision for a permanent, adequate supply should be made as soon as possible.

11. The present storm sewer which discharges into the creek just below the spring is a menace to the health of the community on account of the fact that in times of heavy rain the storm water is forced back into the spring which supplies the city with water.



12. The city has averaged from 30 to 35 cases of typhoid fever a year for the past eight years, and during all that time the spring has been known to be polluted. Typhoid fever will continue to be prevalent until efficient purification of the water supply is provided.

13. The town is well sewerred, but on account of an inadequate supply of water the sewerage system is very little used.

14. The present practice of using cesspools and surface privies tends to a continuance of typhoid fever in the community.

15. Two things are therefore absolutely necessary if the city is to obtain any permanent relief from the scourge of typhoid fever: (1) An adequate and safe water supply; (2) compulsory use of the sewers and abandonment of all cesspools and privies in the sewerred districts.

#### **Recommendations.**

The following recommendations were made for the improvement of the water supply and to aid in stamping out typhoid fever from Greenville:

1. Install immediately a liquid chlorine plant and insure thorough disinfection of the water before delivery to the citizens.

2. Secure as soon as possible a temporary additional supply to prevent a shortage of water during the coming summer and fall.

3. Take steps immediately to provide for filtration of the water supply as the only means by which the water can be made clean as well as safe.

4. Proceed at once with the work of securing an adequate supply of water, either from the Nolichucky River or from some other source which can be depended upon for an unfailing supply. Such supply should be filtered and disinfected if from any surface source, and the filtration plant recommended above for the present supply would be available for that purpose.

5. As soon as the temporary additional supply of water is obtained, compel connection to the sewer from every house on sewerred streets; remove all surface privies and fill all cesspools in the same sections.

These recommended improvements can not be too strongly urged. Money spent in improving the water supply and eliminating typhoid fever is well invested and will pay big returns. The present epidemic of typhoid has cost the city more in actual money than would the measures which would have prevented it, to say nothing of the suffering and deaths. It is much more expensive to maintain typhoid fever in the city than to get rid of it, and no better investment can be made by the city than that of buying freedom from this preventable disease.



## DEATHS DURING WEEK ENDED JAN. 8, 1921.

[From the Weekly Health Index, Jan. 11, 1921, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Jan. 8, 1921, infant mortality, annual death rate, and comparison with corresponding week of preceding years.

City.	Estimated population, July 1, 1921.	Week ended Jan. 8, 1921.		Average annual death rate per 1,000. <sup>2</sup>	Deaths under 1 year.		Infant mortality rate. <sup>3</sup>	
		Total deaths.	Death rate. <sup>1</sup>		Week ended Jan. 8, 1921.	Pre-vious year or years. <sup>2</sup>	Week ended Jan. 8, 1921. <sup>4</sup>	Corre-sponding week, 1919.
Akron, Ohio.....	229,195	37	8.4	6 5.	4	5 3	38	106
Albany, N. Y.....	115,071	27	12.2	C 17.8	3	C 4	67	81
Atlanta, Ga.....	207,473	55	13.8	C 18.0	6	C 10		
Baltimore, Md.....	751,537	205	14.2	A 18.4	30	A 30	84	98
Birmingham, Ala.....	185,544	61	17.1	A 17.5	10	A 8		
Boston, Mass.....	757,476	211	14.5	A 22.2	23	A 44	62	97
Bridgeport, Conn.....	149,502	39	13.6	A 20.2	6	A 8	76	88
Buffalo, N. Y.....	518,568	127	12.8	C 15.0	22	C 28	85	110
Cambridge, Mass.....	110,160	31	14.7	A 10.7	7	A 2	125	70
Camden, N. J.....	119,672	25	10.9		4			
Chicago, Ill.....	2,780,086	671	12.6	A 17.6	117	A 131		
Cincinnati, Ohio.....	403,316	131	16.9	C 20.1	16	C 18	66	88
Cleveland, Ohio.....	831,132	180	11.3	C 16.4	17	C 44	46	95
Columbus, Ohio.....	245,358	68	14.5	C 20.1	4	C 13	46	94
Dallas, Tex.....	165,282	38	12.0	A 13.5	4	A 3		
Dayton, Ohio.....	150,586	24	7.8	C 18.0	5	C 6	82	80
Denver, Colo.....	263,010	99	19.6	A 16.1	6			
Detroit, Mich.....	1,070,320	262	12.8		58		110	97
Fall River, Mass.....	120,668	43	18.6	C 14.7	4	C 2	60	119
Grand Rapids, Mich.....	141,197	34	12.6	C 14.4	4	C 4	68	85
Houston, Tex.....	114,108	33	11.9		3			
Indianapolis, Ind.....	325,215	92	14.8	C 17.0	18	C 13	140	80
Jersey City, N. J.....	302,511	82	14.1	C 15.3	18	C 14		
Kansas City, Kans.....	103,793	27	13.6		4		95	108
Kansas City, Mo.....	336,157	74	11.5	C 18.5	16	C 6		
Los Angeles, Calif.....	610,259	196	16.7	A 15.4	17	A 13	80	67
Louisville, Ky.....	236,083	72	15.9	C 17.4	10	C 5	115	96
Lowell, Mass.....	113,435	44	20.2	A 18.1	8	A 6	129	124
Milwaukee, Wis.....	468,386	80	9.9	A 13.7	14	A 21	68	101
Minneapolis, Minn.....	392,717	110	14.6	C 11.8	14	C 13	80	65
Nashville, Tenn.....	119,536	43	18.8	C 17.0	7	C 3		
New Bedford, Mass.....	125,012	29	12.1	A 14.2	8	A 8	127	122
New Haven, Conn.....	166,836	46	14.4	C 19.1	9	C 6	107	73
New Orleans, La.....	394,875	150	19.8	A 22.9	16	A 21		
New York, N. Y.....	5,753,141	1,409	12.8	C 16.0	184	C 241	72	81
Newark, N. J.....	424,529	120	14.7	C 18.5	22	C 19		
Norfolk, Va.....	121,260	32	13.8				33	108
Oakland, Calif.....	226,587	63	14.5	A 14.3	4	A 5	51	61
Omaha, Nebr.....	197,066	37	9.8	C 11.5	4	C 3		
Philadelphia, Pa.....	1,865,394	502	14.0	16.5	61	78	73	91
Pittsburgh, Pa.....	586,241	194	17.0	C 22.6	28	C 37	99	114
Portland, Oreg.....	264,879	48	9.5	C 8.1	6	C 2	69	69
Providence, R. I.....	239,615	78	17.0	C 17.5	8	C 5		
Richmond, Va.....	175,686	66	19.6	C 18.4	12	C 6	146	106
Rochester, N. Y.....	365,344	53	9.1	C 9.4	10	C 6	78	74
St. Louis, Mo.....	786,161	201	13.3	C 15.7	23	C 20		
St. Paul, Minn.....	237,661	67	14.7	C 12.2	6	C 10	60	68
Salt Lake City, Utah.....	121,595	36	15.4	A 15.8	9		139	77
San Francisco, Calif.....	522,546	128	12.8	C 13.8	11	C 9	64	62
Seattle, Wash.....	327,637	62	9.9	A 11.2	7	A 7	58	55
Spokane, Wash.....	104,174	23	11.5	C 9.0	1	C 1	22	55
Springfield, Mass.....	135,559	36	13.8		4		60	84
Syracuse, N. Y.....	177,184	57	16.8	C 14.7	7	C 5	84	91
Toledo, Ohio.....	253,632	72	14.8	A 15.3	9	A 9	91	90
Trenton, N. J.....	122,760	33	14.0	A 22.0	3	A 6		
Washington, D. C.....	454,026	136	15.6	A 16.8	23	A 12	134	85
Washington, Del.....	113,408	41	18.9	C 18.3	7			
Worcester, Mass.....	184,955	52	14.7	C 19.1	7	C 7	75	92
Yonkers, N. Y.....	133,381	21	10.6	A 10.3	4	A 3	91	80
Youngstown, Ohio.....	139,432	34	12.7		11		139	99

<sup>1</sup> Annual rates per 1,000 population.

<sup>2</sup> "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1918.

<sup>3</sup> Cities left blank are not in the registration area for births.

<sup>4</sup> Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1920.

<sup>5</sup> Data are based on statistics of 1915, 1916, and 1917.

*Summary of information received by telegraph from industrial insurance companies for week ended Jan. 8, 1921.*

Policies in force.....	45, 142, 830
Number of death claims.....	7, 362
Death claims per 1,000 policies in force, annual rate.....	8.5

## PRINCIPAL CAUSES OF DEATH, OCTOBER AND NOVEMBER, 1920.

The accompanying table is reprinted, by permission, from the Statistical Bulletin of the Metropolitan Life Insurance Co. for December, 1920. The figures are based on a strength of approximately 13,000,000.

Although these rates apply to a selected group, they give comparative mortality conditions for the periods covered.

*Death rates (annual basis) per 100,000 for principal causes, October and November, 1920, and year 1919.*

[Industrial Department, Metropolitan Life Insurance Co.]

Cause of death.	Rate per 100,000 lives exposed.		
	November, 1920.	October, 1920.	Year 1919.
Total, all causes.....	813.7	793.7	1,063.0
Typhoid fever.....	9.0	10.6	7.3
Measles.....	2.1	1.2	3.5
Scarlet fever.....	6.8	2.7	3.9
Whooping cough.....	2.6	4.9	3.2
Diphtheria.....	30.4	22.1	20.9
Influenza.....	5.5	5.6	96.9
Tuberculosis (all forms).....	109.7	113.1	156.5
Cancer.....	67.7	71.9	67.0
Meningitis (all forms).....	4.0	4.4	6.4
Cerebral hemorrhage.....	54.8	50.6	59.8
Organic diseases of heart.....	101.6	94.2	113.9
Pneumonia (all forms).....	51.9	37.9	117.2
Other respiratory diseases.....	14.6	12.1	17.0
Diarrhea and enteritis.....	14.3	22.2	16.9
Bright's disease.....	63.0	61.7	73.5
Puerperal state.....	14.9	17.2	20.0
Suicides.....	5.8	6.8	6.8
Homicides.....	5.1	6.4	6.9
Other external causes (excluding suicides and homicides).....	58.9	56.4	80.4
Traumatism by automobile.....	14.5	13.9	10.7
War deaths.....	.4	.1	16.6
All other causes.....	191.0	189.8	181.9

# PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

## UNITED STATES.

### CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Jan. 15, 1921.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.		CONNECTICUT—continued.	
	Cases.		Cases.
Chicken pox.....	33	Conjunctivitis (infectious).....	2
Diphtheria.....	13	Diphtheria:	
Hookworm.....	10	Bridgeport.....	9
Mumps.....	11	Hartford.....	20
Scarlet fever.....	14	New Britain.....	17
Smallpox: *		New Haven.....	14
Jefferson County.....	60	Scattering.....	45
Scattering.....	28	German measles.....	1
Tuberculosis.....	19	Influenza.....	14
Typhoid fever.....	8	Measles:	
		Canton.....	31
		New Britain.....	65
		Scattering.....	39
		Mumps.....	63
		Pneumonia (lobar).....	33
		Scarlet fever:	
		Bridgeport.....	12
		Meriden (city).....	14
		New Haven.....	30
		Waterbury.....	9
		Scattering.....	75
		Septic sore throat.....	1
		Tetanus.....	1
		Trachoma.....	1
		Trichinosis.....	1
		Tuberculosis (all forms).....	42
		Whooping cough.....	88
ARKANSAS.		DELAWARE.	
Chicken pox.....	35	Chicken pox.....	8
Diphtheria.....	47	Diphtheria.....	4
Influenza.....	78	Influenza.....	12
Malaria.....	98	Malaria.....	1
Measles.....	150	Measles.....	2
Ophthalmia neonatorum.....	1	Mumps.....	2
Pellagra.....	5	Pneumonia.....	9
Scarlet fever.....	18	Scarlet fever.....	16
Smallpox.....	15	Tuberculosis.....	6
Trachoma.....	3	Typhoid fever.....	2
Tuberculosis.....	14	Whooping cough.....	22
Typhoid fever.....	15		
Whooping cough.....	42		
CALIFORNIA.			
Influenza.....	23		
Smallpox:			
Sacramento.....	18		
San Francisco.....	53		
Los Angeles.....	12		
Oakland.....	8		
Scattering.....	55		
Typhoid fever.....	3		
Typhus fever:			
Los Angeles.....	1		
Sierra Madre.....	1		
CONNECTICUT.			
Cerebrospinal meningitis.....	2		
Chicken pox.....	52		

FLORIDA.		IOWA—continued.	
	Cases.	Small pox:	Cases.
Cerebrospinal meningitis.....	1	Dubuque.....	33
Diphtheria.....	33	Ossian.....	9
Influenza.....	3	Ottumwa.....	13
Malaria.....	7	Shenandoah.....	44
Pneumonia.....	5	Scattering.....	123
Scarlet fever.....	1		
Smallpox.....	19		
Typhoid fever.....	6		
GEORGIA.		KANSAS.	
Chicken pox.....	46	Chicken pox.....	78
Diphtheria.....	17	Diphtheria.....	121
Dysentery (bacillary).....	1	Influenza.....	9
Dysentery (amebic).....	1	Measles.....	239
Hookworm.....	9	Mumps.....	9
Influenza.....	24	Ophthalmia neonatorum.....	1
Malaria.....	34	Pneumonia.....	35
Measles.....	64	Scarlet fever.....	193
Mumps.....	3	Smallpox.....	147
Pneumonia.....	23	Tuberculosis.....	29
Scarlet fever.....	6	Typhoid fever.....	12
Septic sore throat.....	10	Whooping cough.....	22
Smallpox.....	72		
Tetanus.....	1		
Tuberculosis (pulmonary).....	11		
Typhoid fever.....	14		
Whooping cough.....	6		
ILLINOIS.		LOUISIANA.	
Cerebrospinal meningitis—Chicago.....	3	Diphtheria.....	16
Diphtheria:		Scarlet fever.....	13
Chicago.....	258	Smallpox.....	88
Cook County—New Trier Township.....	8	Typhoid fever.....	15
Decatur.....	8		
Scattering.....	92		
Influenza.....	18		
Lethargic encephalitis:			
Chicago.....	3		
Lagrange.....	1		
Pneumonia.....	222		
Scarlet fever:			
Bloomington.....	13		
Champaign.....	9		
Chicago.....	198		
East St. Louis.....	8		
Normal.....	43		
Oak Park.....	16		
Rockford.....	14		
Springfield.....	67		
Scattering.....	139		
Smallpox:			
Chicago.....	11		
East St. Louis.....	19		
Madison.....	9		
Rockford.....	16		
Stephenson County—Rock Grove Town- ship.....	13		
Vandalia.....	11		
Wayne County—Elm River Township....	9		
Scattering.....	83		
Typhoid fever.....	14		
IOWA.		MAINE.	
Diphtheria.....	27	Chicken pox.....	45
Scarlet fever.....	110	Diphtheria.....	24
		German measles.....	3
		Influenza.....	6
		Measles.....	272
		Mumps.....	3
		Pneumonia.....	8
		Scarlet fever.....	37
		Smallpox.....	2
		Tuberculosis.....	17
		Typhoid fever.....	3
		Whooping cough.....	35
		MARYLAND. <sup>1</sup>	
		Chicken pox.....	134
		Diphtheria.....	74
		German measles.....	3
		Influenza.....	79
		Lethargic encephalitis.....	2
		Measles.....	88
		Mumps.....	25
		Ophthalmia neonatorum.....	1
		Pneumonia (all forms).....	128
		Polioomyelitis.....	1
		Scarlet fever.....	85
		Septic sore throat.....	5
		Smallpox.....	1
		Tetanus.....	1
		Tuberculosis.....	71
		Typhoid fever.....	6
		Whooping cough.....	117
		MASSACHUSETTS.	
		Cerebrospinal meningitis.....	6
		Chicken pox.....	399
		Conjunctivitis (suppurative).....	6
		Diphtheria.....	240

<sup>1</sup> Week ended Friday.

## MASSACHUSETTS—continued.

	Cases.
German measles.....	13
Influenza.....	63
Malaria.....	1
Measles.....	489
Mumps.....	81
Ophthalmia neonatorum.....	33
Pellagra.....	1
Pneumonia (lobar).....	122
Polio-myelitis.....	3
Scarlet fever.....	246
Septic sore throat.....	5
Trachoma.....	2
Tuberculosis (all forms).....	169
Typhoid fever.....	4
Whooping cough.....	133

## MINNESOTA.

Smallpox:	
Kanabec County—Kroschel Township.....	15
Kandiyohi County—Raymond Township.....	15
Polk County—Erskine Village.....	9
Wright County—Walcott Township.....	11
Scattering.....	79

## MISSISSIPPI.

Diphtheria.....	16
Scarlet fever.....	7
Smallpox.....	32
Typhoid fever.....	3

## MISSOURI.

Chicken pox.....	95
Diphtheria.....	199
Epidemic sore throat.....	11
Influenza.....	48
Measles.....	63
Mumps.....	31
Polio-myelitis.....	1
Scarlet fever.....	174
Smallpox.....	161
Trachoma.....	7
Tuberculosis.....	39
Typhoid fever.....	7
Whooping cough.....	67

## MONTANA.

Cerebrospinal meningitis—Billings.....	1
Diphtheria.....	2
Scarlet fever.....	14
Smallpox.....	28
Typhoid fever.....	1

## NEBRASKA.

Cerebrospinal meningitis—Seward County.....	1
Chicken pox.....	60
Diphtheria:	
Omaha.....	8
Scattering.....	17
Influenza.....	4
Measles:	
Dawson.....	17
Scattering.....	6
Mumps.....	2
Scarlet fever:	
Dalton.....	9
Franklin County.....	11
Omaha.....	10
Scattering.....	32

## NEBRASKA—continued.

	Cases.
Smallpox:	
Bloomington.....	18
Dalton.....	9
Merrick County.....	11
Omaha.....	13
Wilber.....	10
Scattering.....	71
Tuberculosis.....	2
Typhoid fever.....	4
Whooping cough.....	9

## NEW JERSEY.

Cerebrospinal meningitis.....	5
Chicken pox.....	373
Diphtheria.....	238
Influenza.....	26
Measles.....	94
Pneumonia.....	194
Scarlet fever.....	298
Smallpox.....	6
Typhoid fever.....	6
Whooping cough.....	224

## NEW YORK.

(Exclusive of New York City.)

Cerebrospinal meningitis:	
Buffalo.....	1
Colonie.....	1
Elba.....	1
Fort Covington.....	1
Grafton.....	1
Saratoga Springs.....	1
Diphtheria.....	254
Influenza.....	109
Lethargic encephalitis.....	1
Measles.....	1,381
Pneumonia.....	364
Polio-myelitis—Northumberland.....	1
Scarlet fever.....	358
Smallpox.....	5
Typhoid fever.....	33
Whooping cough.....	463

## NORTH CAROLINA.

Chicken pox.....	153
Diphtheria.....	55
German measles.....	1
Measles.....	270
Scarlet fever.....	30
Septic sore throat.....	1
Smallpox.....	55
Typhoid fever.....	19
Whooping cough.....	195

## OHIO.

Smallpox:	
Allen County—Delphos—Epidemic.....	
Delaware County—Epidemic.....	
Pike County—Epidemic.....	

## SOUTH DAKOTA.

Chicken pox.....	18
Diphtheria.....	4
Influenza.....	1
Measles.....	29
Pneumonia.....	9
Scarlet fever.....	31

## SOUTH DAKOTA—continued.

	Cases.
Smallpox.....	40
Tuberculosis.....	1
Typhoid fever.....	2
Whooping cough.....	2

## TEXAS.

Chicken pox.....	57
Diphtheria.....	50
Influenza.....	24
Measles.....	10
Mumps.....	7
Scarlet fever.....	30
Smallpox.....	126
Trachoma.....	23
Typhoid fever.....	5
Typhus fever—Taylor.....	1

## VERMONT.

Chicken pox.....	31
Diphtheria.....	6
Influenza.....	1
Measles.....	32
Mumps.....	19
Pneumonia.....	2
Scarlet fever.....	21
Typhoid fever.....	8
Whooping cough.....	65

## VIRGINIA.

Smallpox:	
Bland County.....	1
Buchanan County.....	1

## WASHINGTON.

Chicken pox.....	77
Diphtheria.....	43
German measles.....	1
Measles.....	20
Mumps.....	3
Pneumonia.....	1
Scarlet fever.....	65
Smallpox.....	130
Tuberculosis.....	3

## WASHINGTON—continued.

	Cases.
Typhoid fever.....	2
Whooping cough.....	12

## WEST VIRGINIA.

Diphtheria:	
Wheeling.....	9
Scattering.....	20
Measles:	
Bluefield.....	15
Charleston.....	100
Wheeling.....	29
Scattering.....	10
Scarlet fever.....	27
Smallpox:	
Clarksburg.....	8
Scattering.....	15
Typhoid fever.....	2

## WISCONSIN.

Milwaukee:	
Chicken pox.....	54
Diphtheria.....	34
German measles.....	1
Influenza.....	1
Measles.....	20
Scarlet fever.....	62
Smallpox.....	19
Tuberculosis.....	10
Typhoid fever.....	1
Whooping cough.....	9
Scattering:	
Cerebrospinal meningitis.....	1
Chicken pox.....	158
Diphtheria.....	113
Influenza.....	80
Measles.....	104
Poliomyelitis.....	1
Scarlet fever.....	185
Smallpox.....	246
Tuberculosis.....	19
Typhoid fever.....	15
Whooping cough.....	114

## District of Columbia and Missouri Reports for Week Ended Jan. 8, 1921.

## DISTRICT OF COLUMBIA.

	Cases.		Cases.
Chicken pox.....	45	Scarlet fever.....	37
Diphtheria.....	24	Smallpox.....	1
Influenza.....	2	Tuberculosis.....	16
Lethargic encephalitis.....	1	Typhoid fever.....	2
Measles.....	15	Whooping cough.....	21

## MISSOURI.

Cerebrospinal meningitis.....	1	Poliomyelitis.....	1
Chicken pox.....	139	Scarlet fever.....	212
Diphtheria.....	244	Smallpox.....	139
Epidemic sore throat.....	103	Trachoma.....	4
Influenza.....	51	Tuberculosis.....	34
Measles.....	60	Typhoid fever.....	11
Mumps.....	28	Whooping cough.....	65
Ophthalmia neonatorum.....	1		



## SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomylitis.	Scarlet fever.	Smallpox.	Typhoid fever.
1920.										
California (October).....	13	474	72	80	191	.....	14	374	388	130
California (November).....	12	582	49	36	307	.....	4	474	588	68
District of Columbia (May).....	.....	40	3	.....	82	1	.....	96	12	5
District of Columbia (September).....	.....	34	1	.....	8	.....	2	22	.....	34
District of Columbia (December).....	1	96	50	.....	34	.....	1	102	.....	26
Florida (December).....	3	105	42	97	16	6	2	37	60	42
Massachusetts (December).....	14	943	86	.....	1,876	1	31	919	14	32
Nebraska (December).....	2	110	10	.....	50	.....	.....	303	449	8
Wisconsin (December).....	6	705	163	.....	325	.....	3	718	702	20

## RECIPROCAL NOTIFICATION.

## Connecticut—December, 1920.

Cases of communicable diseases referred during December, 1920, to other State health departments by department of health of the State of Connecticut.

Disease and locality of notification.	Referred to health authority of—	Why referred.
<b>Diphtheria:</b>		
East Haddam, Conn.	State Department of Health, Albany, N. Y.	Patient arrived in East Haddam, Conn., from New York City, within incubation period of disease.
Haddam, Conn.....	State Department of Health, Trenton, N. J.	A small outbreak apparently was caused by a mild unrecognized case who arrived in Haddam, Conn., from Jersey City, N. J.
Norwalk, Conn.....	State Department of Health, Albany, N. Y.	A day pupil of a White Plains, N. Y., school, became ill at his home in Norwalk, Conn.
<b>Measles:</b>		
New Britain, Conn.....	.....do.....	Two patients, recent immigrants, apparently infected on board ship, landed at New York and arrived ill at New Britain, Conn.
<b>Pneumonia:</b>		
Greenwich, Conn.....	.....do.....	Patient treated at Greenwich, Conn., hospital but was taken ill in Port Chester, N. Y.
<b>Scarlet fever:</b>		
Stonington, Conn...	State Department of Public Health, Boston, Mass.	Patient apparently infected on a visit in Boston.
Plainfield, Conn.....	State Board of Health, Providence, R. I.	Patient apparently infected at a school in Providence, R. I.
<b>Tuberculosis:</b>		
Watertown, Conn...	State Board of Health, Baltimore, Md.	Patient ill with tuberculosis left Watertown, Conn., for Notchcliff, Md., for treatment.
<b>Typhoid fever:</b>		
Norwich, Conn.....	State Department of Public Health, Boston, Mass.	Patient returned home to Norwich, Conn., from Dorchester, Mass., and became ill with typhoid the same day.

## ANTHRAX.

## California, Nebraska, New York, and Ohio.

During October, 1920, two cases of anthrax were reported in California; during December, 1920, one case was reported in Nebraska; and during the week ended January 1, 1921, one case was reported at New York, N. Y., and one death was reported at Springfield, Ohio.

## BERIBERI.

California—November, 1920.

During November, 1920, one case of beriberi was reported in California.

## CEREBROSPINAL MENINGITIS.

City Reports for Week Ended Jan. 1, 1921.

The column headed "Average cases" gives the average number of cases reported during the corresponding week of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	Week ended Jan. 1, 1921.		Place.	Average cases.	Week ended Jan. 1, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Michigan:			
Birmingham.....	(1)	1	.....	Detroit.....	(1)	3	2
California:				Nebraska:			
Los Angeles.....	1	2	.....	Omaha.....	(1)	1	1
Riverside.....	0	.....	1	New York:			
San Francisco.....	0	4	1	New York.....	4	8	.....
Illinois:				Ohio:			
Elgin.....	0	.....	1	Ashtabula.....	0	1	.....
Kansas:				Cleveland.....	(1)	1	.....
Kansas City.....	0	1	.....	Oklahoma:			
Wichita.....	(1)	.....	1	Oklahoma City.....	0	1	1
Louisiana:				Tennessee:			
New Orleans.....	0	1	1	Nashville.....	(1)	2	.....
Maryland:				Texas:			
Baltimore.....	1	1	.....	Dallas.....		1	1
Massachusetts:				Wisconsin:	0		
Boston.....	(1)	2	1	Milwaukee.....	(1)	5	5
Salem.....	0	1	1				
Springfield.....	(1)	.....	1				

1 Average less than 1.

## DIPHTHERIA.

See Telegraphic weekly reports from States, p. 83; Monthly summaries by States, p. 87; and Weekly reports from cities, p. 96.

## INFLUENZA.

City Reports for Week Ended Jan. 1, 1921.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Illinois:		
Anniston.....	4	.....	Chicago.....	21	5
Birmingham.....	.....	2	Danville.....	2	.....
Mobile.....	.....	1	Kansas:		
Arkansas:			Kansas City.....	1	.....
Little Rock.....	1	.....	Topeka.....	2	.....
California:			Louisiana:		
Los Angeles.....	5	.....	New Orleans.....	.....	1
Riverside.....	.....	1	Maryland:		
Sacramento.....	2	.....	Baltimore.....	10	.....
San Francisco.....	6	2	Cumberland.....	3	.....
Connecticut:			Massachusetts:		
Hartford.....	1	.....	Boston.....	8	.....
New Britain.....	5	.....	Brockton.....	1	.....
New Haven.....	.....	1	Cambridge.....	1	.....
Waterbury.....	1	.....	Fall River.....	1	.....
District of Columbia:			Lynn.....	.....	1
Washington.....	6	1	Winthrop.....	3	.....
Georgia:			Michigan:		
Atlanta.....	3	.....	Detroit.....	4	.....

## INFLUENZA—Continued.

## City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Minnesota:			Ohio:		
Minneapolis.....	2	1	Cincinnati.....	1	
Missouri:			Cleveland.....		3
Kansas City.....	2	1	Columbus.....	2	1
St. Charles.....	5		Hamilton.....	1	
St. Louis.....	2		Marion.....	1	
New Jersey:			Springfield.....		1
Garfield.....	1		Pennsylvania:		
Newark.....	11	1	Philadelphia.....	4	3
Orange.....	1		South Dakota:		
Trenton.....	6		Sioux Falls.....	1	
New York:			Texas:		
Albany.....	2		Dallas.....	7	1
Binghamton.....	2		Fort Worth.....		2
Cohoes.....	1		Virginia:		
Mount Vernon.....	2		Petersburg.....	1	
New York.....	61	13	Fairmont.....	1	
Niagara Falls.....	1				
Saratoga Springs.....	2				

## LEPROSY.

## California—October, 1920.

During October, 1920, a case of leprosy was reported at Santa Paula, Calif., in the person of B. S., white, male, aged 50, born in Mexico. The disease was diagnosed clinically October 18, 1920, as tubercular leprosy. The patient has lived in the United States for three years and is reported quarantined with guard under the supervision of the city health officer awaiting deportation.

Also during October a case of leprosy was reported at Alameda County Hospital, Alameda County, Calif., in the person of J. G., white, female, aged 74, born in Switzerland. The disease was diagnosed clinically on August 20, 1920, and verified the following day bacteriologically as anesthetic leprosy. The patient has lived at various places in the United States for 35 years and is now in the isolated leper ward of the Alameda County Hospital.

## LETHARGIC ENCEPHALITIS.

## California, District of Columbia, Florida, and Oregon.

One case of lethargic encephalitis was reported in California during October, and four cases were reported during November, 1920. During May four cases were reported in Washington, D. C., and during December one case was reported in Florida. During the week ended January 1, 1921, one case and one death were reported in San Francisco, Calif., and two cases and one death were reported in Portland, Oreg.

**MALARIA.****City Reports for Week Ended Jan. 1, 1921.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Arkansas:			Kentucky:		
Little Rock .....	2	.....	Louisville.....		1
California:			Louisiana:		
Sacramento .....	1	.....	Alexandria .....	7	.....
Georgia:			Texas:		
Atlanta .....	1	.....	Dallas .....	1	.....
Brunswick .....	1	.....			

**MEASLES.**

See Telegraphic weekly reports from States, p. 83; Monthly summaries by States, p. 87; and Weekly reports from cities, p. 96.

**PELLAGRA.****Charleston, S. C., and Dallas, Tex.**

During the week ended January 1, 1921, one death from pellagra was reported at Charleston, S. C., and one case and one death were reported at Dallas, Tex.

**PLAGUE.<sup>1</sup>****Human Cases of Plague Reported.**

Place.	Period covered.	Cases.	Deaths.	Remarks.
Florida:	1921.			
Pensacola.....	Jan. 1 to 15.....	0	0	
Louisiana:				
New Orleans.....	do.....	0	0	
Texas:				
Beaumont.....	do.....	0	0	
Galveston.....	do.....	0	0	

**Plague-Infected Rodents.**

Place.	Period covered.	Rodents found plague infected.
Florida:	1921.	
Pensacola.....	Jan. 1 to 15.....	0
Louisiana:		
New Orleans.....	Jan 1 to 13.....	1
	Jan. 14 to 15.....	2
Texas:		
Beaumont.....	Jan. 1 to 15.....	0
Galveston.....	do.....	0

<sup>1</sup> A summary of the reports received of the occurrence of plague and the finding of plague-infected rodents in the United States during 1920 was published in Public Health Reports, Jan. 7, 1921, p. 15.

## PNEUMONIA (ALL FORMS).

City Reports for Week Ended Jan. 1, 1921.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Kentucky:		
Anniston.....	2		Covington.....	1	
Birmingham.....		12	Louisville.....	2	4
Mobile.....		3	Louisiana:		
Montgomery.....	2		Alexandria.....	2	1
Arizona:			Lake Charles.....		3
Tucson.....		2	New Orleans.....		21
Arkansas:			Maine:		
Little Rock.....	1		Biddeford.....		1
North Little Rock.....		1	Portland.....		3
California:			Sanford.....	1	
Alameda.....	1		Maryland:		
Eureka.....	1	1	Baltimore.....	52	18
Long Beach.....	2		Cumberland.....	2	1
Los Angeles.....	46	12	Massachusetts:		
Oakland.....	4	6	Arlington.....		2
Pasadena.....	3		Attleboro.....		1
Redlands.....		1	Boston.....	29	30
Riverside.....	1		Brockton.....		2
Sacramento.....		3	Brookline.....	1	
San Diego.....	3	3	Cambridge.....	4	3
San Francisco.....	12	8	Chelsea.....	3	2
Santa Cruz.....	2		Clinton.....	1	1
Vallejo.....		2	Danvers.....	2	
Colorado:			Easthampton.....	1	
Denver.....		26	Everett.....		1
Pueblo.....		7	Fall River.....	8	9
Connecticut:			Haverhill.....	5	3
Bridgeport.....	6	5	Lawrence.....	1	
Bristol.....	1		Lowell.....	1	5
Greenwich.....	1		Lynn.....	6	3
Hartford.....		2	Medford.....	1	1
Meriden.....	1		Methuen.....	1	
New Britain.....	7	4	New Bedford.....	1	3
New Haven.....	2	2	Newton.....	10	3
New London.....	1	2	Pittsfield.....	1	2
Norwalk.....	1	1	Plymouth.....		1
Waterbury.....	6	4	Quincy.....	1	2
District of Columbia:			Salem.....	3	4
Washington.....		15	Somerville.....	2	1
Georgia:			Southbridge.....	4	2
Atlanta.....		13	Waltham.....	5	5
Brunswick.....	1		Worcester.....		12
Rome.....	1		Michigan:		
Savannah.....		2	Battle Creek.....	1	
Illinois:			Detroit.....	67	20
Aurora.....	3	1	Flint.....		1
Bloomington.....	1		Grand Rapids.....	5	1
Chicago.....	248	69	Highland Park.....	4	2
Danville.....	2		Ironwood.....	1	1
Galesburg.....	1	2	Ishpeming.....	2	
Jacksonville.....		11	Kalamazoo.....	6	
Kankakee.....	1		Muskegon.....	5	1
Monmouth.....		1	Pontiac.....	1	1
Peoria.....		2	Minnesota:		
Rock Island.....	4	1	Duluth.....		1
Springfield.....		2	Minneapolis.....	3	25
Indiana:			St. Paul.....		8
Bedford.....		2	Missouri:		
East Chicago.....	3		Columbia.....		1
Gary.....	2		Kansas City.....	13	13
Hammond.....	2		St. Charles.....	1	
Huntington.....	1		St. Joseph.....		5
Indianapolis.....	10		Montana:		
Kokomo.....	1		Anaconda.....		2
Mishawaka.....	2		Butte.....		6
Newcastle.....	1		Great Falls.....	2	1
Richmond.....	1		Missoula.....		1
South Bend.....	1		Nebraska:		
Terre Haute.....	1		Beatrice.....		1
Iowa:			Lincoln.....	1	5
Council Bluffs.....		1	Omaha.....		7
Mason City.....		1	New Hampshire:		
Kansas:			Concord.....		2
Coffeyville.....	1		Dover.....	1	1
Kansas City.....	5		Portsmouth.....	1	
Topeka.....		2			
Wichita.....	8	6			

## PNEUMONIA (ALL FORMS)—Continued.

City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
New Jersey:			Ohio—Continued.		
Atlantic City.....	2	.....	Cincinnati.....	4	3
Bayonne.....	2	.....	Cleveland.....	35	22
Belleville.....	1	.....	Columbus.....	.....	5
East Orange.....	3	2	Dayton.....	1	.....
Elizabeth.....	2	3	East Cleveland.....	1	.....
Englewood.....	2	2	Findlay.....	3	3
Garfield.....	4	.....	Hamilton.....	1	1
Hackensack.....	1	1	Ironton.....	1	1
Harrison.....	1	.....	Lima.....	.....	2
Hoboken.....	2	5	Mansfield.....	3	.....
Irvington.....	2	.....	Marion.....	1	.....
Jersey City.....	19	.....	Newark.....	.....	1
Kearny.....	2	.....	Springfield.....	1	1
Montclair.....	1	2	Toledo.....	.....	4
Newark.....	113	16	Youngstown.....	.....	5
Orange.....	3	.....	Oklahoma:		
Passaic.....	3	2	Oklahoma City.....	.....	2
Paterson.....	3	.....	Oregon:		
Perth Amboy.....	.....	3	Portland.....	.....	5
Plainfield.....	.....	3	Pennsylvania:		
Trenton.....	6	3	Philadelphia.....	84	70
West New York.....	.....	1	Rhode Island:		
West Orange.....	1	.....	Cranston.....	1	1
New Mexico:			Newport.....	.....	1
Albuquerque.....	1	.....	Pawtucket.....	.....	1
New York:			Providence.....	.....	15
Albany.....	11	.....	South Carolina:		
Auburn.....	.....	1	Charleston.....	.....	6
Binghamton.....	19	2	South Dakota:		
Buffalo.....	50	26	Sioux Falls.....	.....	2
Cohoes.....	5	.....	Tennessee:		
Glens Falls.....	3	.....	Nashville.....	.....	5
Ithaca.....	3	.....	Texas:		
Jamestown.....	4	1	Beaumont.....	.....	3
Lockport.....	2	.....	Dallas.....	15	4
Mount Vernon.....	4	.....	El Paso.....	.....	17
Newburgh.....	2	1	Fort Worth.....	.....	2
New York.....	261	185	Galveston.....	.....	2
Niagara Falls.....	5	5	Utah:		
North Tonawanda.....	.....	1	Salt Lake City.....	.....	6
Olean.....	.....	3	Vermont:		
Pekskill.....	2	.....	Rutland.....	.....	2
Poughkeepsie.....	1	2	Virginia:		
Rochester.....	12	2	Alexandria.....	1	.....
Rome.....	2	.....	Lynchburg.....	.....	4
Saratoga Springs.....	2	1	Norfolk.....	3	5
Schenectady.....	8	5	Petersburg.....	.....	1
Syracuse.....	11	6	Richmond.....	.....	8
Troy.....	14	2	Roanoke.....	2	.....
Watertown.....	2	.....	West Virginia:		
Yonkers.....	15	7	Charleston.....	.....	2
North Carolina:			Fairmont.....	1	.....
Charlotte.....	.....	3	Huntington.....	.....	3
Durham.....	1	.....	Wheeling.....	.....	4
Greensboro.....	.....	2	Wisconsin:		
Raleigh.....	1	.....	Beloit.....	.....	1
Wilmington.....	1	.....	Janesville.....	.....	3
Winston-Salem.....	4	.....	La Crosse.....	15	.....
Ohio:			Madison.....	.....	2
Akron.....	4	.....	Milwaukee.....	2	11
Alliance.....	.....	1	Oshkosh.....	.....	1
Canton.....	1	.....	Racine.....	.....	3
Chillicothe.....	2	.....	Wausau.....	.....	2



**POLIOMYELITIS (INFANTILE PARALYSIS).****City Reports for Week Ended Jan. 1, 1921.**

The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	Week ended Jan. 1, 1921.		Place.	Average cases.	Week ended Jan. 1, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Illinois:				Massachusetts:			
Kankakee.....	0	1	1	Boston.....	( <sup>1</sup> )	1	.....
Kansas:				Lowell.....	0	1	.....
Kansas City.....	0	1	.....	Southbridge.....	.....	1	.....
				Waltham.....	0	1	.....

<sup>1</sup> Average less than 1.

**SCARLET FEVER.**

See Telegraphic weekly reports from States, p. 83; Monthly summaries by States, p. 87; and Weekly reports from cities, p. 96.

**SMALLPOX.****Port Arthur, Tex.**

Under date of January 5, 1921, smallpox was reported epidemic at Port Arthur, Tex.

**St. Paul, Minn.**

During the 10 days ended January 10, 1921, 113 cases of smallpox were reported in St. Paul, Minn. The disease is of a very mild type.

**City Reports for Week Ended Jan. 1, 1921.**

The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	Week ended Jan. 1, 1921.		Place.	Average cases.	Week ended Jan. 1, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Illinois—Continued.			
Birmingham.....	( <sup>1</sup> )	2	.....	East St. Louis.....	0	13	.....
Mobile.....	( <sup>1</sup> )	4	.....	Elgin.....	3	1	.....
Montgomery.....	( <sup>1</sup> )	1	.....	Evanston.....	0	2	.....
Arkansas:				Kewanee.....	.....	1	.....
Hot Springs.....	1	1	.....	Rock Island.....	1	3	.....
Little Rock.....	6	1	.....	Springfield.....	3	1	.....
California:				Indiana:			
Los Angeles.....	1	4	.....	Bedford.....	0	2	.....
Oakland.....	0	1	.....	Frankfort.....	.....	3	.....
Sacramento.....	( <sup>1</sup> )	13	.....	Hammond.....	( <sup>1</sup> )	2	.....
San Francisco.....	0	25	.....	Indianapolis.....	15	6	.....
Colorado:				La Fayette.....	1	4	1
Denver.....	15	4	.....	Marion.....	0	7	.....
Fueblo.....	0	4	.....	Mishawaka.....	1	2	.....
Georgia:				South Bend.....	0	31	.....
Atlanta.....	2	19	1	Terre Haute.....	0	7	.....
Brunswick.....	0	1	.....	Iowa:			
Illinois:				Cedar Rapids.....	1	3	.....
Bloomington.....	1	5	.....	Council Bluffs.....	4	1	.....
Chicago.....	2	7	.....	Davenport.....	7	1	.....

<sup>1</sup> Average less than 1.

## SMALLPOX—Continued.

## City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Average cases.	Week ended Jan. 1, 1921.		Place.	Average cases.	Week ended Jan. 1, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Iowa—Continued.				Ohio—Continued.			
Des Moines.....	5	5		Ashtabula.....	0	1	
Dubuque.....	( <sup>1</sup> )	25		Barberton.....	0	6	
Mason City.....	1	2		Canton.....	1	11	
Kansas:				Cincinnati.....	3	1	
Hutchinson.....	0	2		Cleveland.....	10	2	
Kansas City.....	( <sup>1</sup> )	2		Columbus.....	1	1	
Leavenworth.....	0	1		Dayton.....	1	1	
Parsons.....	0	3		Fostoria.....		1	
Kentucky:				Lancaster.....	0	1	
Lexington.....	0	1		Lima.....	0	14	
Louisville.....	0	2		Lorain.....	( <sup>1</sup> )	4	
Louisiana:				Mansfield.....		1	
Alexandria.....	( <sup>1</sup> )	4		Middletown.....	1	2	
Monroe.....		1		Springfield.....	( <sup>1</sup> )	1	
New Orleans.....	2	28	7	Tiffin.....	0	4	
Maine:				Toledo.....	3	11	1
Waterville.....		3		Youngstown.....	0	2	
Massachusetts:				Oklahoma:			
Methuen.....		1		Oklahoma City.....	2	4	
Michigan:				Tulsa.....		2	
Battle Creek.....	0	12		Oregon:			
Detroit.....	15	39		Portland.....	20	19	
Sault Ste. Marie.....	0	15		South Carolina:			
Minnesota:				Charleston.....	0	7	
Duluth.....	( <sup>1</sup> )	10		Columbia.....	0	1	
Mankato.....	0	2		Tennessee:			
Minneapolis.....	10	135		Knoxville.....	( <sup>1</sup> )	3	
St. Cloud.....	5	1		Nashville.....	( <sup>1</sup> )	5	
St. Paul.....	6	52		Texas:			
Stillwater.....	0	2		Corpus Christi.....	2	1	
Winona.....	0	10		El Paso.....	( <sup>1</sup> )	1	
Missouri:				Utah:			
Joplin.....	1	1		Salt Lake City.....	3	17	
Kansas City.....	21	8		Vermont:			
St. Louis.....	3	10		Rutland.....	0	4	
Montana:				Virginia:			
Butte.....	7	1		Lynchburg.....	0	1	
Missoula.....	0	2		Norfolk.....	( <sup>1</sup> )	2	
Nebraska:				Petersburg.....		1	
Omaha.....	11	7		West Virginia:			
New York:				Bluefield.....	( <sup>1</sup> )	1	
Buffalo.....	2	1		Wisconsin:			
Jamestown.....	0	1		Eau Claire.....	1	1	
New York.....	( <sup>1</sup> )	1		Green Bay.....	2	10	
North Carolina:				Madison.....	( <sup>1</sup> )	2	
Winston-Salem.....	2	4		Marinette.....	( <sup>1</sup> )	2	
North Dakota:				Milwaukee.....	2	5	
Fargo.....	( <sup>1</sup> )	5		Sheboygan.....		13	
Ohio:				Superior.....	2	3	
Akron.....	4	9					
Alliance.....	0	1					

<sup>1</sup> Average less than 1.

## TETANUS.

## City Reports for Week Ended Jan. 1, 1921.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
California:			Ohio:		
Los Angeles.....	1	1	Akron.....	1	1
New York:			Mansfield.....	1	
New York.....	1		Pennsylvania:		
			Philadelphia.....	1	

## TRICHINOSIS.

## California—November, 1920.

During November, 1920, one case of trichinosis was reported in California.

## TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 83, and Weekly reports from cities, p. 96.

## TYPHOID FEVER.

## Epidemic at Philippi, W. Va.

An epidemic of typhoid fever has been reported at Philippi, W. Va. To January 8, 1921, 30 cases had been notified.

## City Reports for Week Ended Jan. 1, 1921.

The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Average cases.	Week ended Jan. 1, 1921.		Place.	Average cases.	Week ended Jan. 1, 1921.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Massachusetts—Contd.			
Birmingham.....	2	2		Lowell.....	(1)	1	
Arkansas:				Michigan:			
Fort Smith.....	0	2		Ludington.....	0	1	
Hot Springs.....	0	1		Marquette.....	0	1	
Little Rock.....	0	1		Traverse City.....		3	
California:				Minnesota:			
Los Angeles.....	3	3	1	Minneapolis.....	2	1	
San Francisco.....	2	2		Missouri:			
Colorado:				Joplin.....	0	1	
Denver.....	(1)		1	Kansas City.....	2	1	
Pueblo.....	0	1		St. Louis.....	5	5	
Connecticut:				Nebraska:			
New Haven.....	(1)	1		Omaha.....	(1)	1	
Norwalk.....	0	1		New Jersey:			
Norwich.....	0	2		Bayonne.....	0	1	
Delaware:				Jersey City.....	1	5	
Wilmington.....	(1)	1		New York:			
District of Columbia:				Albany.....	4	3	
Washington.....	2	3		Binghamton.....	(1)	1	
Georgia:				Buffalo.....	2	2	
Atlanta.....	(1)	1		New York.....	18	11	2
Idaho:				Peekskill.....	0	2	
Boise.....	0	1		Rochester.....	(1)	1	
Illinois:				Troy.....	1	1	
Aurora.....	0		1	Ohio:			
Chicago.....	6	3		Ashtabula.....	0	3	
Danville.....	1	1		Cleveland.....	1	1	
Rock Island.....	0	1		Dayton.....	(1)	1	
Indiana:				Sandusky.....	(1)		1
Fort Wayne.....	(1)	1		Toledo.....	1		1
Huntington.....	1	1		Oklahoma:			
Indianapolis.....	1	1		Oklahoma City.....	(1)	1	
La Fayette.....	0	2		Tulsa.....		2	
Muncie.....	2	1		Pennsylvania:			
Kansas:				Philadelphia.....	3	3	2
Kansas City.....	(1)	1		Texas:			
Leavenworth.....	0	1		Austin.....	0	1	
Kentucky:				Vermont:			
Lexington.....	(1)	2	1	Rutland.....	(1)	2	
Louisville.....	(1)	2	1	Virginia:			
New Orleans.....	3	2		Norfolk.....	0	4	
Maine:				Richmond.....	(1)	1	
Lewiston.....		1	1	West Virginia:			
Portland.....	0	1		Charleston.....	0		1
Waterville.....		1		Martinsburg.....	0	1	
Maryland:				Parkersburg.....	(1)	6	
Baltimore.....	4	7		Wisconsin:			
Massachusetts:				Manitowoc.....	0	1	
Chelsea.....	(1)	1		Milwaukee.....	1	2	
Lawrence.....	(1)	1		Sheboygan.....		3	

<sup>1</sup> Average less than 1.

## TYPHUS FEVER.

## Waco, Tex.—January 3, 1921.

On January 3, 1921, one case of typhus fever was reported at Waco, Tex.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

## City Reports for Week Ended Jan. 1, 1921.

Place.	Popula- tion Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston.....	17,734		2							
Birmingham.....	178,270	57	7				9	1	7	5
Mobile.....	69,151	21	1							3
Montgomery.....	43,461	20	1		12		1		2	1
Arizona:										
Tucson.....	20,292	15								9
Arkansas:										
Fort Smith.....	28,811		3				2			
Hot Springs.....	11,635	8								2
Little Rock.....	64,907		1		29		1		2	
North Little Rock.....	14,048	4	1		1		2			
California:										
Alameda.....	28,806	11			2				1	2
Eureka.....	17,923	6					3	1		
Long Beach.....	55,593	18	3		1					
Los Angeles.....	556,673	191	67	3	128		16		38	19
Oakland.....	216,361	45	1				5	1	3	5
Pasadena.....	45,354	18					2		1	1
Riverside.....	19,341	10	1		16					
Sacramento.....	65,857	26	6				2		5	3
San Bernardino.....	18,721	5	2							
San Diego.....	74,683	25	3		1				7	6
San Francisco.....	508,410	147	15	1	6		13		18	15
Santa Barbara.....	19,441	5								
Santa Cruz.....	10,917	5	1	1						
Vallejo.....	21,107	3					2			
Colorado:										
Denver.....	256,360	129	9	3	139		11			13
Greeley.....	10,883	3			1		3			1
Pueblo.....	42,908	15	2		1		5		1	1
Connecticut:										
Bridgeport (town) <sup>1</sup> .....	143,558	58	5	3	1		8		2	2
Bristol (town) <sup>1</sup> .....	20,620	5			5				1	
Greenwich (town).....	22,123	4	8		3		2			
Hartford (town) <sup>1</sup> .....	138,096	37	10		3		14		1	3
Manchester (town).....	18,370	2			1					
Meriden (city).....	29,842		4	1			16			
New Britain (town) <sup>1</sup> .....	59,316	15	8	1	36		19			
New Haven (town) <sup>1</sup> .....	162,519	45	24	2	2		34		12	2
New London (town) <sup>1</sup> .....	25,688	6	4		1		5			
Norwalk (town) <sup>1</sup> .....	27,700	2	5							
Norwich (city).....	22,304	2	1				4			
Waterbury (town) <sup>1</sup> .....	91,419	25	4	1			7		1	
Delaware:										
Wilmington.....	110,168	39			1		3	1		1
District of Columbia:										
Washington.....	437,571	113	16	1	8		25		22	6
Georgia:										
Atlanta.....	290,616	80	4		11		7	1		1
Brunswick.....	14,413	3								
Rome.....	13,252		3				1			
Savannah.....	83,252	39	3				1		1	1
Idaho:										
Boise.....	21,393	6	1				1			
Illinois:										
Alton.....	24,682	12	1	1						
Aurora.....	36,397	15			2		1			1
Bloomington.....	28,725	7					6			
Centralia.....	12,491	3								
Chicago.....	2,701,705	579	236	29	130	2	184	6	146	32
Danville.....	33,750	12							1	
Decatur.....	43,818	8	9		1		1			1
East St. Louis.....	66,740	10	5				6		2	1
Elgin.....	27,454	6	5							
Evanston.....	37,215	7	5		2		3			
Freeport.....	19,669	5	2							1
Galesburg.....	23,834	6	3							
Granite City.....	14,757	1								
Jacksonville.....	15,713	48			2		2			2
Kankakee.....	16,753	3			6		1			

<sup>1</sup> Coextensive with city of same name.

## DIPHtheria, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Popula- tion Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois—Continued.										
Kewanee.....	16,026	5	2		3		12			
La Salle.....	13,050	2								
Mattoon.....	13,552						1			
Pekin.....	12,086		2				1			
Peoria.....	76,121	20	3				15			
Rockford.....	65,651	6	4	1			1			
Springfield.....	59,183	15	2		4		49	1		1
Indiana:										
Bloomington.....	11,595	2								
East Chicago.....	35,967	13								
Elkhart.....	24,277	6			1		3			
Elwood.....	10,790	8								
Fort Wayne.....	36,549	17	3				5	1		1
Frankfort.....	11,585	5					1			
Gary.....	55,378	20	2				1			2
Hammond.....	36,004	8					5		1	1
Huntington.....	14,000	4	2				7			
Indianapolis.....	314,194	74	6	3	13		46		4	3
Kokomo.....	30,067	8								
La Fayette.....	22,486	8	1				4			
Logansport.....	21,626	6								
Marion.....	23,747	8	2		1		1	1		
Mishawaka.....	15,185	3					1			
Muncie.....	36,624	8	4	1	3		2		1	1
Newcastle.....	14,458	4								
Richmond.....	25,765	9	2				2		2	
South Bend.....	70,983	5	2	1			4	1		
Terre Haute.....	66,083	20	4		1		10			
Iowa:										
Burlington.....	24,057	7								
Cedar Rapids.....	45,566		3				2			
Council Bluffs.....	36,162	9	2				7			
Dayton.....	56,727						2			
Des Moines.....	123,408		3		1		2			
Dubuque.....	39,141		2				3			
Iowa City.....	11,267		1							
Keokuk.....	14,423	1								
Marshalltown.....	15,731		1				1			
Mason City.....	20,065	8					1			
Muscatine.....	16,068	6								
Kansas:										
Atchinson.....	12,630		1		1					
Coffeyville.....	13,452	10								
Fort Scott.....	10,693	9	3							
Hutchinson.....	23,293		5						4	
Kansas City.....	101,177		8				1		3	
Lawrence.....	12,456	2					2			
Leavenworth.....	16,912	2	4				1			
Parsons.....	16,628		3				1			
Salina.....	15,085	3	6		5		2			
Topeka.....	50,022	14			77		8		1	1
Wichita.....	72,128	42	11	1	1		3		2	2
Kentucky:										
Covington.....	57,121	14					3			1
Lexington.....	41,534	18					3			
Louisville.....	234,861	80	17	1	2		3			
Paducah.....	24,735		2						2	7
Louisiana:										
Alexandria.....	17,510	6	1							
Lake Charles.....	13,088	10								3
Monroe.....	12,675	3	1						1	1
New Orleans.....	387,219	151	10	1	202	1	9		16	17
Maine:										
Auburn.....	16,985	3			17					
Biddeford.....	18,008				2		1			
Lewiston.....	31,761	8	2		19		3			
Portland.....	66,272	17	5		4		3			1
Sanford.....	10,661	1								
Waterville.....	13,351						1			

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maryland:										
Baltimore.....	733,826	221	46	2	15		23		15	22
Cumberland.....	23,837	7	2						1	
Massachusetts:										
Adams.....	12,967	2							1	
Amesbury.....	10,036	0	1				2			
Arlington.....	18,665	5								
Attleboro.....	19,731	5	1							
Boston.....	748,060	229	70	5	41	2	42	4	34	15
Brockton.....	66,138		3		9		1		1	1
Brookline.....	37,748	9	1		3		1			1
Cambridge.....	109,694	27	6		3		1		2	2
Chelsea.....	43,184	18	3		4		1		1	1
Chicopee.....	36,214	4	1				1			1
Clinton.....	12,979	7			10				1	1
Danvers.....	11,108								4	
Easthampton.....	11,261								3	
Everett.....	40,120	10	3				5		2	
Fall River.....	129,485	44	3		38	2	3		3	1
Framingham.....	17,033	1			6					
Greenfield.....	15,462	6					5			
Haverhill.....	55,884	14	9						2	1
Holyoke.....	63,203	11					1		4	3
Lawrence.....	94,270	22	3				3		7	1
Leominster.....	19,744	5	1		3				1	
Lowell.....	112,479	37	6		85	4	3		6	3
Lynn.....	99,148	30	8		3		12		4	3
Malden.....	49,103	16	5		4		5			
Medford.....	39,038	12	1				2		2	
Melrose.....	18,204	4	1				2			
Methuen.....	15,189	3			2		1		1	
New Bedford.....	121,217	21	8	1					3	1
Newburyport.....	15,618	3					2			
Newton.....	46,054		3		11		1			
North Adams.....	22,282	5								
Northampton.....	21,951	11			1					
Pittsfield.....	41,751	7			67		2		2	1
Plymouth.....	13,045	4								
Quincy.....	47,876	8	9		3		1		1	1
Salem.....	42,529	19	1							1
Somerville.....	93,091	14	3	2	4		4		6	4
Southbridge.....	14,245	3							1	
Springfield.....	129,563	42	5	1	1		16		1	
Wakefield.....	13,025	1			1					
Waltham.....	30,915	10					4		2	
Watertown.....	21,457	2	2		1		1			
Westfield.....	18,604	7							1	1
Winthrop.....	15,455	0	1		2					
Woburn.....	16,574	6								1
Worcester.....	179,754	40	1				28	2	5	1
Michigan:										
Ann Arbor.....	19,516	5	1				1			
Battle Creek.....	36,164						3			
Detroit.....	993,739	213	162	13	18		90	5	33	18
Flint.....	91,599	18	6				3			1
Grand Rapids.....	137,634	38	16				6		4	1
Highland Park.....	46,499	10	3		1		7			
Ironwood.....	15,739	3			12		3		2	
Ishpeming.....	10,500	1	1				1			
Kalamazoo.....	48,858	16	1		2		12		1	1
Marquette.....	12,718	2					1			
Muskegon.....	36,570	6	1				8			
Pontiac.....	34,273	12	2		1		12		4	
Sault Ste. Marie.....	12,096	2			1		2			
Traverse City.....	10,925	4		1			2			
Minnesota:										
Duluth.....	98,917	14					7		2	
Hibbing.....	15,089		1							
Mankato.....	12,469	3			1					
Minneapolis.....	380,582	91	8	1	2		58	1	5	8
St. Paul.....	234,395	63	35	1	1		18		14	8
Virginia.....	14,022		2				1			
Winona.....	19,143						2			



# DIPHThERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Popula- tion Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Missouri:										
Cape Girardeau.....	10,252	2					6			1
Columbia.....	10,379	5					2			1
Independence.....	11,686	4	5		1					
Joplin.....	29,855		2				9			
Kansas City.....	324,410	78	15		1		2		4	8
St. Joseph.....	77,939	31	4	1	1		1			
St. Louis.....	772,897	197	183	8	4		54	1	26	15
Montana:										
Anaconda.....	11,668	6			1		3			1
Billings.....	15,100	6			29		1			
Butte.....	41,611	27	1		11				1	3
Great Falls.....	24,121	4			28		1			
Missoula.....	12,668	2								
Nebraska:										
Lincoln.....	54,934	14			1		4			1
Omaha.....	191,601	50	9	2	1		8			4
Nevada:										
Reno.....	12,016	3								
New Hampshire:										
Berlin.....	16,104	5					1			
Concord.....	22,167	7								
Dover.....	13,029	5			9					
Keene.....	11,210	2					1		1	
Manchester.....	78,384	16	22	1	1		3		3	
Portsmouth.....	13,509		2						1	
New Jersey:										
Asbury Park.....	12,400	5					1		1	
Atlantic City.....	50,682	7	8				2		1	2
Bayonne.....	76,754						2		2	
Belleville.....	15,660		1				2			
Bloomfield.....	22,019	5	3				2			
East Orange.....	50,710	7	7				10			
Elizabeth.....	95,682		11				7		5	1
Englewood.....	11,627	7					1			
Garfield.....	19,381		1				1			
Gloucester City.....	12,162		1							
Hackensack.....	17,667	8							1	
Harrison.....	15,721		1							
Hoboken.....	68,166	18	2				1			1
Irvington.....	25,480						1			
Jersey City.....	297,864		44				11		11	
Kearney.....	26,724	6	1				2			
Montclair.....	28,810	7			7		1		1	
Morristown.....	12,548	6					3		1	
New Brunswick.....	32,779		5				2		1	
Newark.....	414,216	99	28		31		47		31	5
Orange.....	33,268	8	4				3		1	
Passaic.....	63,824	18	8		6		6		2	1
Paterson.....	135,866		10		5		11		3	
Perth Amboy.....	41,707	10	1		9		7			
Phillipsburg.....	16,923	1								
Plainfield.....	27,700	9	3				4			1
Rahway.....	11,642	2							2	
Trenton.....	119,289	38	9	1			2			1
West New York.....	29,926	2	2				1			
West Orange.....	15,373	1	3				1		1	1
New Mexico:										
Albuquerque.....	15,157	9	4	1	40		1			5
New York:										
Albany.....	113,344		4		30		3		14	
Auburn.....	39,192	12	5		1					
Binghamton.....	66,800	27	1		167	2			3	1
Buffalo.....	506,773	131	90	6	75	1	40	2	14	12
Cohoes.....	22,687	6	2		4				2	
Elmira.....	45,305	10							2	
Geneva.....	14,618	3								
Glens Falls.....	16,638	9	1		1					3
Hudson.....	11,745	4			1					
Ithaca.....	17,004	1								
Jamestown.....	38,917	8	4		1		3			
Lockport.....	21,308	2					1			

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Popula- tion Jan. 1, 1923, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York—Continued.										
Middletown.....	18,420		1		37		1		1	
Mount Vernon.....	42,726	8	8		2		1		1	
Newburgh.....	30,366		1				4		1	
New York.....	5,621,151	1,386	415	35	74	4	312	13	193	299
Niagara Falls.....	50,760	13	3		3		24		2	
North Tonawanda.....	15,482	5					1			
Ogdensburg.....	14,609	7								
Olean.....	20,506	5								
Peekskill.....	15,868	3	1		13					
Plattsburg.....	10,909	3								
Port Chester.....	16,573	5								
Poughkeepsie.....	35,000	7	2	1					1	
Rochester.....	295,750	63	60	4	6		23	1	5	2
Rome.....	26,341				7				3	
Saratoga Springs.....	13,181	4			17					
Schenectady.....	88,723	18	9		21		2		2	
Syracuse.....	171,717	59	13	1	22	1	22	3	2	2
Troy.....	72,013	20			135		3		1	
Watertown.....	31,285			1			7		1	
White Plains.....	21,031	5	1				1			
Yonkers.....	100,226	25	6		1		10		9	3
North Carolina:										
Charlotte.....	46,338	19			50				2	2
Durham.....	21,719	5	2							
Greensboro.....	19,861	5								
Raleigh.....	24,418	7	4		10					
Rocky Mount.....	12,742	7								
Wilmington.....	33,372	13	1	1			1		1	1
Winston-Salem.....	48,395	15			27		1			3
North Dakota:										
Fargo.....	21,961	8					3			
Ohio:										
Akron.....	208,435	37	4		3		11		5	
Alliance.....	21,603	8	1							
Ashtabula.....	22,082	3					6			1
Barberton.....	18,811	7								1
Canton.....	87,001	8	7		4		4		1	2
Chillicothe.....	15,831	3	1				4			
Cincinnati.....	401,247	103	12	2	2		22		7	12
Cleveland.....	796,836	32	8	11	1		90	5	13	15
Columbus.....	237,031	61	14	1			8	1	2	4
Dayton.....	152,559	47	5		2		7		1	
East Cleveland.....	27,292						1			
Findlay.....	17,021	10					2			
Fremont.....	12,468	2								
Hamilton.....	39,675	10	1		1		7		3	2
Ironton.....	14,007	9					12		1	2
Lancaster.....	14,706				1					
Lima.....	41,306	9	2				4			
Lorain.....	37,295	3			1		2			
Mansfield.....	27,824	7	1							
Middletown.....	23,594	5	2						2	
Newark.....	26,718	10					1		1	1
New Philadelphia.....	10,718						2			
Norwood.....	24,966	5	1	1			3			
Piqua.....	15,044	2								
Sandusky.....	22,897	5	1		1					
Springfield.....	60,810	17	1		6		2		1	1
Steubenville.....	28,508	7								
Tiffin.....	14,375	3								
Toledo.....	243,109	66	45				18		8	6
Youngstown.....	132,358	40	3		10		7	1	3	2
Zanesville.....	29,569	5							2	
Oklahoma:										
Oklahoma City.....	91,258	18	8				4			
Tulsa.....	72,075		6		2		3		2	1
Oregon:										
Portland.....	258,288	42	8	1	47		5		9	2

\* Pulmonary tuberculosis only.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended Jan. 1, 1921—Continued.

Place.	Popula- tion Jan. 1, 1921, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Pennsylvania:										
Philadelphia.....	1,823,158	473	114	10	16		175	5	51	40
Rhode Island:										
Cranston.....	29,407	10	1				3			
East Providence (town).....	21,793		2				3			
Newport.....	30,255	10	3				1			
Pawtucket.....	64,248	16	6	1			3			1
Providence.....	237,595	76	18		39		11			3
South Carolina:										
Charleston.....	67,957	25	1	1						4
Columbia.....	37,524								2	
South Dakota:										
Sioux Falls.....	25,176	10			1		3			
Tennessee:										
Knoxville.....	77,818		3				2		3	3
Nashville.....	118,342	49	1		1		1			9
Texas:										
Austin.....	34,876	11	1				1			2
Beaumont.....	40,422	16								2
Corpus Christi.....	10,522	6			2					3
Dallas.....	158,976	55	17						24	3
El Paso.....	77,543	52	2		1		2			7
Fort Worth.....	106,482	17		1						
Galveston.....	44,255	18	6	1						
Waco.....	38,500	7								2
Utah:										
Salt Lake City.....	118,110	32			353		7	1	2	2
Vermont:										
Burlington.....	22,779	6	1				7			1
Rutland.....	14,954	4	1							
Virginia:										
Alexandria.....	18,060	4								1
Lynchburg.....	29,956	17								
Norfolk.....	115,777		4		14		2		4	3
Petersburg.....	31,002	15	1						1	1
Richmond.....	171,667	48	13	1	5		3			2
Roanoke.....	50,842	10	3		16		7			
West Virginia:										
Bluefield.....	15,282		1		8		5			
Charleston.....	39,608	16	3		36				1	
Fairmont.....	17,851		5		1		1			
Huntington.....	50,177	22					1			
Morgantown.....	12,127	0								
Moundsville.....	10,669	2					2			
Parkersburg.....	20,050	4	1							
Wheeling.....	54,322	15	6		9		2			2
Wisconsin:										
Appleton.....	19,561		1		1		3			
Beloit.....	21,284	2			1					
Eau Claire.....	20,880				2		2			
Fon du Lac.....	23,427	8	3							
Green Bay.....	31,017	5	2				5			
Janesville.....	18,293	6					4		2	1
Kenosha.....	40,472	6	3				1			1
La Crosse.....	39,363	3			1		1			1
Madison.....	38,378	9	1				7		3	
Manitowoc.....	17,563	2								
Milwaukee.....	457,147	106	56	2	15		35		24	13
Oshkosh.....	33,162	11								1
Racine.....	58,593	14	9		4		5			1
Sheboygan.....	39,955						3			
Superior.....	39,624	7	2		3					3
Wausau.....	18,661	9					1		1	

## FOREIGN AND INSULAR.

### YELLOW FEVER ON VESSEL.

#### Steamship *Savoia*—From Vera Cruz—At Habana.

Three cases of yellow fever were reported on the steamship *Savoia* from Vera Cruz, at Habana, Cuba, January 12, 1921.

#### CUBA.

##### Beriberi on Vessel—Habana.

According to information dated January 8, 1921, the Chinese steamship *Wallowra*, from China via Panama Canal, arrived at Habana, Cuba, December 27, 1920, with 37 cases of beriberi on board. One of these cases terminated fatally December 28, 1920. The *Wallowra* gave a history of epidemic beriberi with seven fatalities en route.

##### Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Dec. 21-31, 1920.		Re- main- ing under treat- ment Dec. 31, 1920.	Disease.	Dec. 21-31, 1920.		Re- main- ing under treat- ment Dec. 31, 1920.
	New cases.	Deaths.			New cases.	Deaths.	
Cerebrospinal meningitis.	1	1	2	Measles.	6		15
Chicken pox.	1		6	Scarlet fever.			1
Diphtheria.	1	1	2	Smallpox.	1		1
Leprosy.			12	Typhoid fever.	18	7	2 42
Malaria.	90	1	112				

<sup>1</sup> From the interior, 48; from abroad, 1.

<sup>2</sup> From the interior, 24; from abroad, 3.

#### DANZIG.

##### Typhus Fever.

A case of typhus fever occurring in an emigrant from Brest-Litovsk with history of a recent two weeks' stay in Warsaw, Poland, was reported at Danzig, December 20, 1920.

**DENMARK.****Measures Against Importation of Typhus Fever.**

Under date of November 27, 1920, all Baltic ports of Russia, including those in Esthonia, Latvia, and Lithuania and the port of Danzig, were declared infected with typhus fever, and measures against importation of the infection were made applicable to all vessels arriving from or having touched at these ports. Crews and passengers having sailed from these ports or having come in contact with a person suffering from typhus fever were made subject to medical examination. The period within which this examination was required was 21 days from departure or date of contact.

**GREAT BRITAIN.****Examination of Rats—Plague Rat Found—Liverpool.**

During the two weeks ended December 11, 1920, out of 500 rats examined bacteriologically from a "take" of 3,945 rats, one rat was found plague infected.

**Plague—Dublin—October, 1920.<sup>1</sup>**

A case of plague was discovered at Dublin, Ireland, in a person admitted to hospital October 18, 1920. The residence of the patient was stated to have been in the vicinity of the quays, but the source of infection was not determined. No infection among rats was reported.

**POLAND.****Cholera—Eastern Frontier.**

Information dated December 16, 1920, shows the presence of cholera on the eastern frontier of Poland, at Bialystok, Grodno, and Olitza, in the Russian prison camp near Posen, and at Stralkowo. A fatal case of cholera was reported at Strelno.

**RUSSIA.****Plague—Batum.**

An epidemic outbreak of plague has been reported at Batum Russia, with 38 cases notified from November 24 to December 3, 1920.

**TURKEY.****Contagious Diseases on Vessels—Constantinople.**

Information dated December 7, 1920, shows that vessels arriving at Constantinople with Russian refugees have had much contagious disease on board. Five fatal cases of plague were reported on the steamship *Lazarew*. On the steamship *Beshtau* 90 cases of typhoid fever were reported. Typhus fever was stated to be present on all the arriving vessels.

<sup>1</sup> Public Health Reports, Jan. 14, 1921, p. 63.

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.****Reports Received During Week Ended Jan. 21, 1921.<sup>1</sup>****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Calcutta.....	Nov. 21-27.....	56	51	
Philippine Islands:				
Manila.....	Nov. 28-Dec. 4....	2		
Poland:				
Eastern Frontier—				
Bialystok.....	Dec. 16.....			Present.
Grodno.....	do.....			Do.
Olitza.....	do.....			Do.
Posen.....	do.....			Present in Russian prison camp.
Stralkowo.....	do.....			Present.
Strelno.....	do.....	1	1	

**PLAGUE.**

Azores:				
St. Michaels.....				Total, Oct. 1-Dec. 10, 1920: Cases, 149; deaths, 49. In vicinity of Ponta Delgada.
Brazil:				
Bahia.....	Oct. 31-Nov. 13....	4	3	
British East Africa:				
Nairobi.....	Nov. 8.....			Total for Kenya Colony, Nov. 8, 1920: Cases, 1,067.
Uganda.....	Oct. 29-Nov. 5....	168		Serious outbreak reported.
Ceylon:				
Colombo.....	Nov. 21-27.....	10	5	
France:				
Marseille.....	June-Aug. 31.....	58	20	
Paris.....	June-Oct. 15.....	50	11	In suburbs, June-Nov. 2, 1920: Cases, 38; deaths, 19.
Great Britain:				
Liverpool.....				Plague-infected rat found, period Nov. 28-Dec. 11, 1920.
India.....				Nov. 11-20, 1920: Cases, 2,552; deaths, 1,769.
Madras Presidency.....	Nov. 28-Dec. 4....	371	267	
Rangoon.....	Nov. 21-27.....	3	3	
Mexico:				
Carbonera.....	Dec. 14-20.....	1	1	State of San Luis Potosi.
Do.....	Dec. 29-Jan. 1.....	2		Do.
Cerritos.....	Dec. 14-20.....	3	5	
Do.....	Dec. 26-Jan. 1.....	1		
Russia:				
Batum.....	Nov. 24-Dec. 3....	38		Epidemic outbreak.

**SMALLPOX.**

Austria:				
Vienna.....	Aug. 29-Sept. 25...	13		Aug. 29-Nov. 6, 1920: Cases, 62.
Brazil:				
Bahia.....	Oct. 31-Nov. 13....	3		
Rio de Janeiro.....	Nov. 21-Dec. 11....	27	10	
Canada:				
Ontario—				
Hamilton.....	Jan. 2-8.....	10		
Niagara Falls.....	Dec. 12-18.....	1		
Ottawa.....	Dec. 26-Jan. 1.....	64		
Ceylon:				
Colombo.....	Nov. 21-27.....	3	3	
China:				
Nanking.....	Nov. 28-Dec. 4....			Present.
Tientsin.....	Nov. 28-Dec. 4....			Present.
Cuba:				
Havana.....	Dec. 31-Jan. 5....	5		
Czechoslovakia:				
France:				
Rouen.....	Dec. 5-11.....	4	1	July 11-Aug. 14, 1920: Cases, 141; deaths, 29.
Germany:				
Berlin.....	Oct. 20-Nov. 6....	1		Aug. 29-Nov. 6, 1920: Cases, 40.

<sup>1</sup> From medical officers of the Public Health Service, American consuls and other sources.



# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received During Week Ended Jan. 21, 1921—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Glasgow.....	Dec. 19-25.....	7	1	
India:				
Madras.....	Nov. 28-Dec. 4.....	4	2	
Rangoon.....	Nov. 21-27.....	1		
Java:				
West Java.....				Nov. 12-13, 1920: Cases, 17;
Batavia.....	Nov. 12-18.....	4	1	deaths, 2.
Madeira:				
Funchal.....	Dec. 12-18.....		1	
Mexico:				
Chihuahua.....	Dec. 27-Jan. 2.....		3	
Federal District.....	Nov. 14-27.....	8		Including Mexico City.
Spain:				
Barcelona.....	Dec. 9-15.....		3	
Turkey:				
Constantinople.....	Dec. 5-11.....	3		
On vessels:				
S. S. Alfonso XIII.....	Dec. 27.....	1		At Habana, Cuba, from ports in
				northern Spain.
S. S. Cadiz.....	Jan. 5.....	1		At Habana, Cuba, from Mediter-
				anean ports.
S. S. Ohioan.....	Jan. 4.....	1		At San Pedro, Calif., from New
				York, via Balboa, Canal Zone.

## **TYPHUS FEVER.**

Belgium:				
Ghent.....	Dec. 12-13.....	5		
Czechoslovakia.....				July 11-Aug. 23, 1920: Cases, 138;
				deaths, 18.
Danzig.....	Dec. 20.....	1		In emigrant from Brest-Litovsk,
Egypt:				with two weeks' stay at War-
Alexandria.....	Dec. 3-9.....	5	2	saw.
Cairo.....	Oct. 15-21.....	7	3	
Germany.....				Sept. 12-Nov. 13, 1920: Cases, 69,
Hungary.....				Aug. 3-Oct. 3, 1920: Cases, 9.
Mexico:				
Federal District.....	Nov. 14-27.....	35		Including Mexico City.
Netherlands:				
Rotterdam.....				September, 1920. One case.
Turkey:				
Constantinople.....	Dec. 5-11.....	4		

## **YELLOW FEVER.**

Mexico:				
Tuxpam.....	Dec. 23-Jan. 1.....	5	1	
Vera Cruz.....	do.....	1		
On vessels:				
S. S. Savoia.....	Jan. 12.....	3		At Habana, Cuba, from Vera
				Cruz, Mexico.

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.****Reports Received from Jan. 1 to 14, 1921.<sup>1</sup>****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Changsha.....	Nov. 29.....			Present.
Chungking.....	do.....			Do.
Chosen (Korea).....				Nov. 19-25, 1920: Deaths, 22.
India:				Sept. 26-Oct. 9, 1920: Deaths, 2,672.
Calcutta.....	Oct. 31-Nov. 6.....	68	59	
Japan:				
Taiwan Island (Formosa).....	Nov. 11-30.....	77	58	
Java:				
West Java.....				Oct. 29-Nov. 11, 1920: Cases, 2; deaths, 1.
Bandoeng.....	Oct. 29-Nov. 11.....	2	1	
Philippine Islands:				
Manila.....	Nov. 7-27.....	3		
Provinces.....				Jan. 10-Oct. 30, 1920: Cases, 80; deaths, 51.
Cagayan.....	Oct. 3-9.....	5	3	
Samar.....	Aug. 1-7.....	1	1	
Poland:				
Warsaw.....	Dec. 16.....	5		
Siam:				
Bangkok.....	Oct. 9-Nov. 13.....	4		

**PLAGUE.**

Algeria:				
Algiers.....	Nov. 1-30.....		1	
Brazil:				
Porto Alegre.....	Nov. 14-Dec. 11.....		3	
Pernambuco.....	Oct. 18-Nov. 14.....	9	1	
British East Africa:				
Kisumu.....	Oct. 31-Nov. 6.....			Present.
Mombasa.....	do.....	1	1	
Nairobi.....	Oct. 31-Nov. 13.....	6	2	
Uganda.....	May 1-June 30.....	111	103	Entire Protectorate.
Do.....	July 1-Aug. 31.....	91	63	Do.
Ceylon:				
Colombo.....	Nov. 7-20.....	10	12	
Chile:				
Antofagasta.....	Nov. 24-Dec. 5.....	6	2	
China:				
Hongkong.....	Nov. 7-20.....	3	3	
Ecuador:				
Guayaquil.....	Nov. 16-30.....	18	7	
Egypt:				
Cities—				Jan. 1-Nov. 25, 1920: Cases, 456; deaths, 264.
Suez.....	Nov. 18-24.....	6	3	
Provinces—				
Assiout.....	Nov. 24.....	3	2	
Great Britain:				
Dublin.....				1 case reported Dec. 15, 1920; date of occurrence not reported.
Greece:				
Kavala.....	Oct. 25-Nov. 7.....	2		
India:				
Madras Presidency.....	Nov. 14-27.....	976	618	
Rangoon.....	Oct. 31-Nov. 20.....	10	9	
Mesopotamia:				
Bagdad.....	Oct. 1-31.....	25	7	
Mexico:				
Carbonera.....	Dec. 5-18.....	2		State of San Luis Potosi.
Cerritos.....	Dec. 5-12.....	4	3	Do.
Vera Cruz.....				Oct. 24-30, 1920. Cases, 1; pneumonic.
Straits Settlements:				
Singapore.....	Oct. 31-Nov. 6.....	1	1	
Turkey:				
Constantinople.....	Nov. 21-27.....	1	2	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources. For reports received from June 26 to Dec. 31, 1920, see Public Health Reports for Dec. 31, 1920. The tables of epidemic diseases are terminated semiannually and new tables begun.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Jan. 1 to 14, 1921—Continued.**

## **SMALLPOX.**

Place.	Date.	Cases.	Dsath.	Remarks.
Brazil:				
Pernambuco.....	Oct. 18-Nov. 14...	77	1	
Rio de Janeiro.....	Oct. 24-30.....	66	13	
British East Africa:				
Uganda.....				May 1-June 30, 1920: Cases, 272.
Bulgaria:				
Sofia.....	Nov. 7-13.....	2		
Canada:				
Alberta—				
Calgary.....	Dec. 12-13.....	2		
British Columbia—				
Vancouver.....	Dec. 5-11.....	1		
New Brunswick—				
Restigouche County....	Dec. 12-18.....	1		
Ontario—				
Hamilton.....	Dec. 19-31.....	9		
North Bay.....	Dec. 12-23.....	4		
Ottawa.....	Dec. 12-23.....	75	1	
Toronto.....	do.....	7		
Do.....	Dec. 26-Jan. 1.....	10		
Saskatchewan—				
Moose Jaw.....	Dec. 19-25.....	1		
Regina.....	Dec. 12-23.....	11		
Saskatoon.....	Dec. 16-22.....	20		
China:				
Amoy.....	Nov. 7-20.....		2	
Chungking.....	Nov. 7-13.....			Present.
Foochow.....	Nov. 7-27.....			Do.
Nanking.....	Nov. 14-20.....			Do.
Tientsin.....	Nov. 14-20.....	2		Nov. 27, present.
Tsinanfu.....	Oct. 31-Nov. 12.....	20		Statistics of Shantung Christian Hospital.
Colombia:				
Santa Marta.....	Dec. 5-25.....			Present.
Cuba:				
Antilla.....	Dec. 7-27.....	10		For port of Preston.
Nuevitas.....	Dec. 6-12.....	1		From Lugareno, a small station on railway, 16 miles distant.
Santiago.....	Nov. 29-Dec. 10.....	26		
Danzig.....	Dec. 5-11.....	1		
Dominican Republic.				Nov. 15-Dec. 7, 1920: Cases, 8; occurring in 4 localities.
Ecuador:				
Guayaquil.....	Nov. 16-30.....	7	1	
Egypt:				
Cairo.....	Oct. 1-7.....	1		
France:				
Paris.....	Nov. 1-10.....	1	1	
Rouen.....	Nov. 21-27.....	2	1	
Great Britain:				
Glasgow.....	Dec. 5-11.....	4	1	
Haiti:				
Port au Prince.....	Sept. 22-Dec. 2.....	486	2	In 8 interior towns, 20 cases. In 1 locality, 18 cases. In country district, vicinity of Port au Prince, cases numerous.
India:				
Bombay.....	Nov. 7-13.....	1	1	Sept. 26-Oct. 9, 1920. Deaths, 250.
Madras.....	Nov. 14-20.....	1	1	
Jugo-Slavia.....	July 25-Aug. 28.....	128	42	Feb. 7-13, 1920: Cases, 122; deaths, 27.
Madeira:				
Funchal.....	Dec. 5-11.....		1	
Mexico:				
Chihuahua.....	Dec. 6-23.....	11	3	
Portugal:				
Lisbon.....	Nov. 28-Dec. 4.....		1	
Portuguese East Africa:				
Lourenco Marques.....	Oct. 24-Nov. 13.....	9		
Quelimane.....	do.....	3		
Russia:				
Reval.....	Oct. 1-31.....	3		
Riga.....	Nov. 1-7.....	5		
Spain:				
Barcelona.....	Nov. 18-Dec. 1.....		5	
Corunna.....	Dec. 12-18.....		1	
Valencia.....	Dec. 5-18.....	2		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**

**Reports Received from Jan. 1 to 14, 1921—Continued.**

## **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Syria: Aleppo.....	Nov. 14-Dec. 4.....	.....	.....	Present in orphanage and French camps.
Tunis: Tunis.....	Nov. 30-Dec. 13....	10	5	
Turkey: Constantinople.....	Nov. 21-27.....	1	.....	
Union of South Africa: Johannesburg.....	Oct. 1-31.....	1	.....	

## **TYPHUS FEVER.**

Chile: Concepcion.....	Nov. 1-22.....	.....	17	Feb. 7-13, 1920: Cases, 84; deaths, 2.
Valparaiso.....	Oct. 25-Nov. 27....	.....	13	
Egypt: Alexandria.....	Nov. 10-Dec. 2.....	3	3	
Cairo.....	Oct. 1-14.....	12	6	
Great Britain: Belfast.....	Dec. 5-11.....	3	.....	
Dublin.....	Nov. 28-Dec. 18....	4	3	Present.
Greece: Saloniki.....	Oct. 25-Nov. 7.....	6	3	
Serres.....	Nov. 8-14.....	1	.....	
Japan: Nagasaki.....	Nov. 15-21.....	2	.....	
Jugo-Slavia.....	July 25-Aug. 28....	27	5	
Mexico: San Luis Potosi.....	Dec. 5-25.....	.....	.....	Also called Gutierrez. State of Vera Cruz.
Poland: Warsaw.....	Dec. 16.....	8	.....	
Portugal: Oporto.....	Nov. 22-Dec. 4....	1	.....	
Russia: Reval.....	Sept. 1-Oct. 31....	186	.....	
Riga.....	Nov. 1-7.....	17	.....	
Turkey: Constantinople.....	Nov. 21-Dec. 4....	13	.....	

## **YELLOW FEVER.**

Mexico: Orizaba.....	Dec. 5-18.....	2	1	Also called Gutierrez. State of Vera Cruz.
Papantla.....	do.....	8	2	
Tampico.....	Dec. 12-18.....	1	1	
Tuxpam.....	Dec. 5-18.....	9.	4	
Vera Cruz.....	Dec. 5-26.....	8	3	
Zamora.....	Dec. 12-18.....	1	1	